



PBP

Certification

Student Handout

Contents

Slides	3
Practice Questions	3
Practice Questions 1	89
Practice Questions 2.....	97
Practice Questions 3.....	104
Practice Questions 4	112
Practice Questions 5.....	120

Slides



Welcome

Agenda

1. Introduction
 - What is Project Business?
2. When the Project is the Business
 - Players & roles
 - The Process
 - The customer-contractor interface
 - Legal & commercial factors
 - Interpersonal relationship and leadership
 - Integrity
3. The Process for Project Business
 - The overall process and decision points
 - Business development
 - Carrying out the work
4. Contract Knowledge and Special Tools
 - Contract types
 - Other forms of project business
 - Tools for customers:
 - The “Mission Success First” paradigm
 - Rolling Award Fee contracts
 - Tools for contractors:
 - Strengthening the project manager’s role
 - Benefit engineering
5. Examination



©2023 Project Business Foundation

Sl. 2

The Project Business Foundation



Think tank for project business management

- Addressing
 - People and organizations involved in the management of Project Business
- Location
 - Munich, Germany
- Outreach
 - Global
- Website
 - <https://Project-Business.org>

The screenshot shows the homepage of the Project Business Foundation website. At the top right is a search bar and a red 'Search' button. Below the header are navigation links: Home, Certification, Research, Tools, About, and a logo. The main banner features a night cityscape background with the text 'Project Business Foundation' and 'Think tank for cross-corporate Project Business Management'. To the right, a person is shown holding a newspaper titled 'Project Business'. Below the banner is a navigation menu with links like 'On this page', 'Research & Tools', 'Who Benefits?', 'How to Benefit?', 'Links to...', 'The Driving Force', and 'The Book'. A decorative graphic of two hands shaking is at the bottom left. At the bottom right is a link to 'Market Research, Free Tools, and Certifications for Project Business'.

©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 3

The Project Business Foundation



Other programs of the Project Business Foundation

- ACE certification
 - Credential for Approved Consultants and Educators
 - <https://project-business.org/certification/ace-certification>
- Project Business Healing Days
 - "Family therapy" for organizations involved in cross-corporate projects
- ADR – Alternative Dispute Resolution
 - Mediation and arbitration for project business partners in conflicts
- Project Management Health Checks
 - Audits of contract partners
- Events, research, templates and more.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 4

The Project Business Compendium



A guide for trainers and learners

- Published by the Project Business Foundation
- 128 pages
- Includes the Project Business Glossary
- An introduction to the world of systematic project business management
- Free download from
https://project-business.org/wp-content/uploads/Project_Business_CompPENDUM_03-2023.pdf
- This seminar is aligned with the
Project Business Compendium

©2023-2025, Oliver F. Lehmann, Project Business Foundation

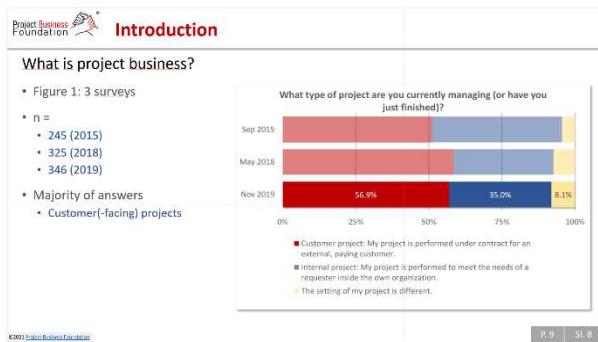


This Slide Deck



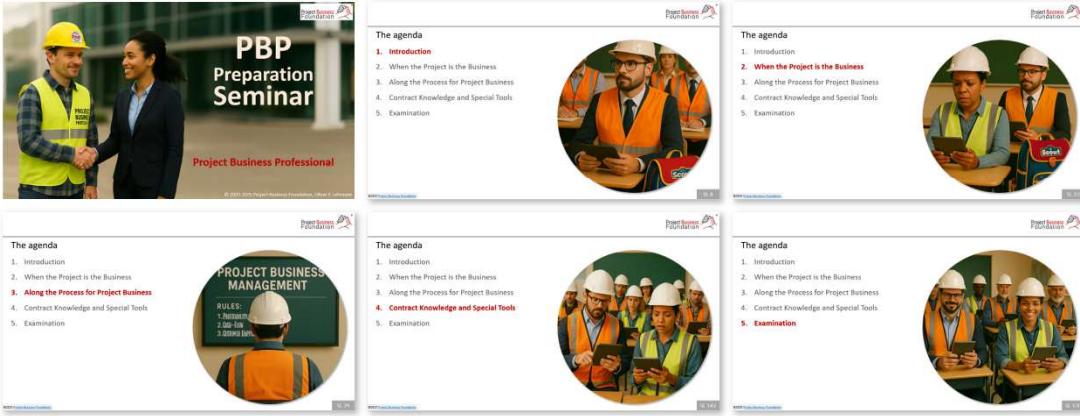
How to make the best from this slide deck

- Find corresponding page numbers in
 - Project Business Compendium
 - Other sources
- The webinar will repeatedly be interrupted for practice questions, that you should answer, before we go on with the next module.
- Some practice questions will refer to topics not yet discussed in this presentation.
- If you have questions:
 - Contact the Project Business Foundation



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 6



©2023-2025, Oliver F. Lehmann, [Project Business Foundation](#)

Sl. 7

The agenda

- 1. Introduction**
2. When the Project is the Business
3. Along the Process for Project Business
4. Contract Knowledge and Special Tools
5. Examination



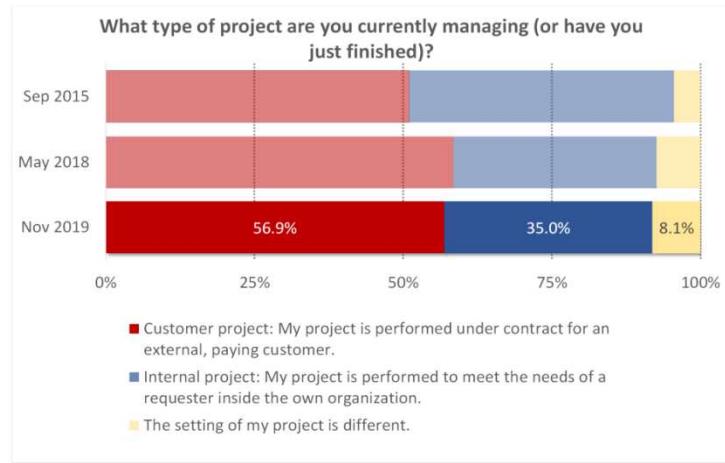
©2023 Project Business Foundation

Sl. 8

Introduction

What is project business?

- Figure 1: 3 surveys
- n =
 - 245 (2015)
 - 325 (2018)
 - 346 (2019)
- Majority of answers
 - Customer(-facing) projects



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 9

Sl. 9

Introduction

What is project business?



©2023-2025, Oliver F. Lehmann, Project Business Foundation

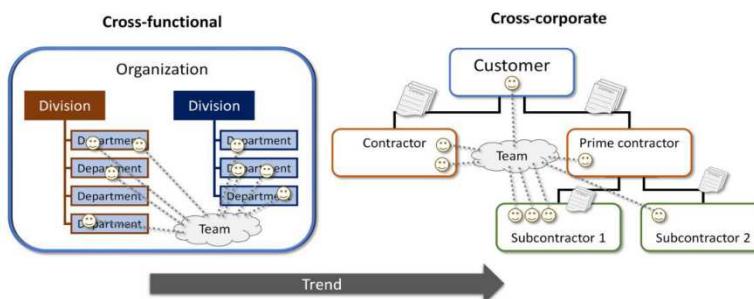
Sl. 10

Introduction

What is project business?

- The trend
 - From: **Cross-functional**, internal teams in internal projects
 - To: **Cross-corporate** teams in project business based on Project supply networks (PSNs)

Examples of Project Teams



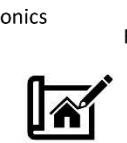
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 10 Sl. 11

Introduction

Is the trend industry-dependent?

- The trend can be observed across all industries



...and many more

Sl. 12

©2023-2025, Oliver F. Lehmann, Project Business Foundation

Introduction

Project business brings new opportunities



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 13

- Revenue for contractors
- Access to external assets
- Time for self-actualization
- Acceleration of learning curves
- Reduced TTM (Time to market)
- Expanded networks of professionals

Introduction

Project business is high-risk business



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 14

- Project risks
- Business relationship risks
- Commercial risks
- Legal risks

Introduction

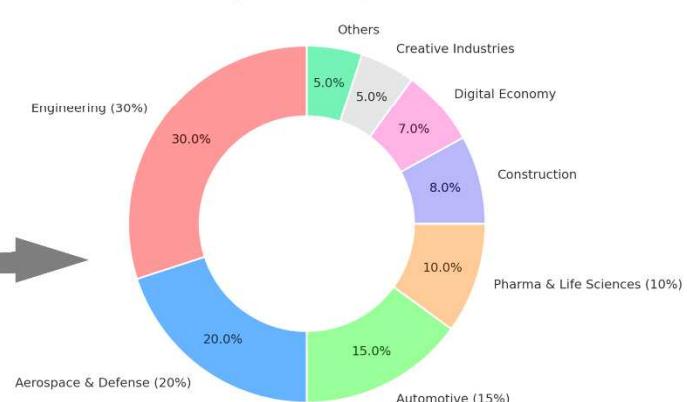
Project business contributes 20% to 30% to Global GDP*

- Note: All numbers are estimates

Project Business Share of Global GDP



Sector Composition of Project Business



* GDP 2024: \$ 110 Trillion

©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 15

Introduction

Fact:

- Organizations need **well-trained professionals** to run their project business.

Observation:

- Most practitioners learn project business management by **trial and error**.

However,...

- Trial in project business is **expensive**.
- Error even more.

WHO HOW
WHEN ? WHERE
WHAT
WHY



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 16

Introduction

Literature for experts and practitioners

- Internal, cross-functional projects
 - A Guide to the Project Management Body of Knowledge (*PMBOK Guide® 7th Ed.*)
 - IPMA Individual Competency Baseline
 - Scrum Guide
 - Prince2
 - Most project management standards and literature

Cross-functional projects



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 14 Sl. 17

Introduction

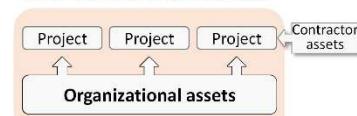
Literature for experts and practitioners

- Internal, cross-functional projects
 - Cross functional projects with “extended workbench” (some procurement)
 - A Guide to the Project Management Body of Knowledge (*PMBOK Guide®*)
 - Some project management literature
- => Extended workbench: A project manager must justify procuring project work and products.

Cross-functional projects



Cross-functional projects with “extended workbench”



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 14 Sl. 18

Introduction

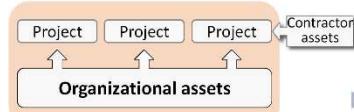
Literature for experts and practitioners

- Internal, cross-functional projects
- Cross functional projects with “extended workbench” (some procurement)
- Cross-corporate projects
 - The Project Business Compendium
 - Project Business Management by Oliver F. Lehmann
 - <https://www.routledge.com/9780367522070>
 - (Very limited other literature)
- => Truly cross-corporate: The project manager must rather justify the use of internal resources.

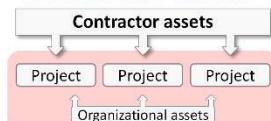
Cross-functional projects



Cross-functional projects with “extended workbench”



Cross-corporate projects



P. 14

Sl. 19

©2023-2025, Oliver F. Lehmann, Project Business Foundation

Introduction

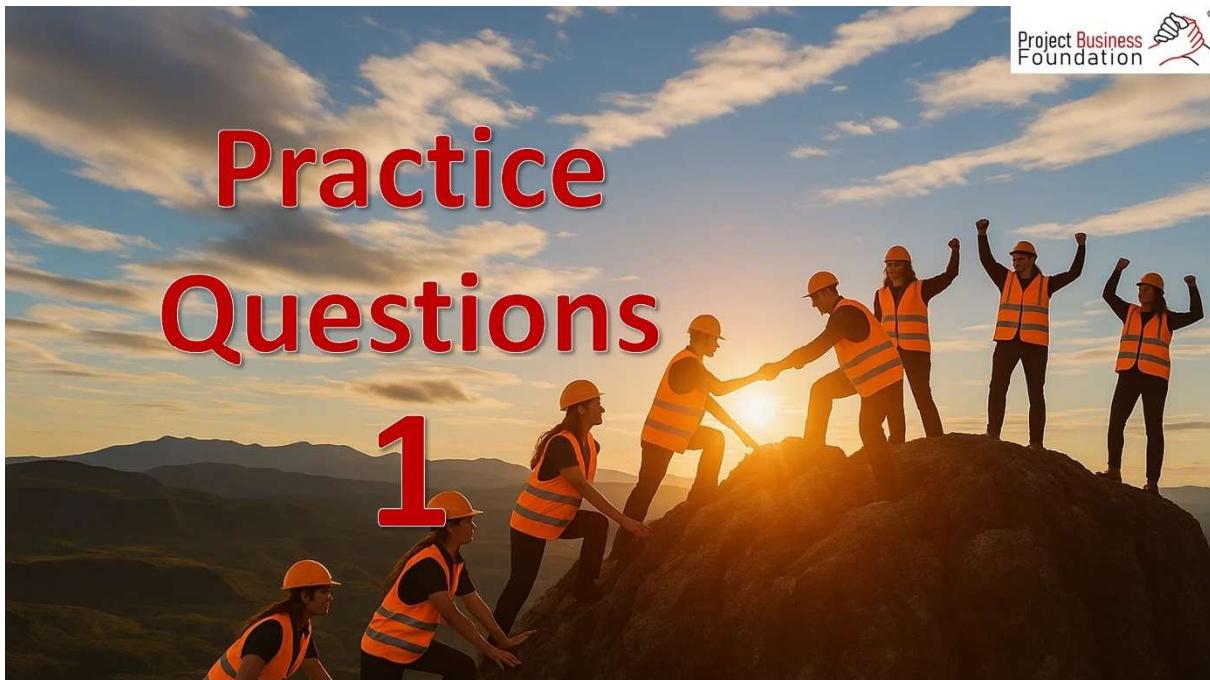
Specific skills needed along the project business lifecycle

- Between the Make-or-buy decision and the end of the business, specific disciplines are involved in Project Business Management on both sides, buyers and sellers:
 - Business relationship management
 - Financial management
 - Legal management
- By learning from the Project Business Foundation, you build a basis to improve the commercial side of your projects across all industries.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 20



The agenda

1. Introduction
2. When the Project is the Business
3. Along the Process for Project Business
4. Contract Knowledge and Special Tools
5. Examination

The agenda

1. Introduction
- 2. When the Project is the Business**
3. Along the Process for Project Business
4. Contract Knowledge and Special Tools
5. Examination



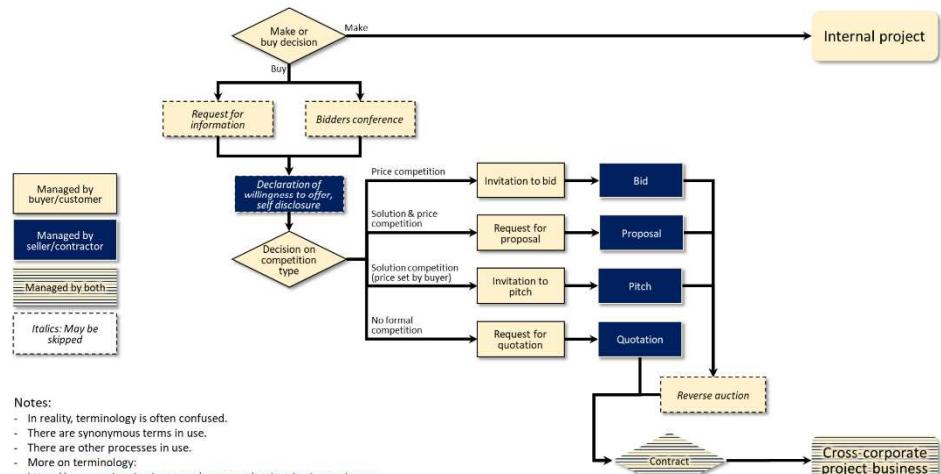
Sl. 23

©2023 Project Business Foundation

When the Project is the Business

The starting point:

- The Make-or-Buy decision



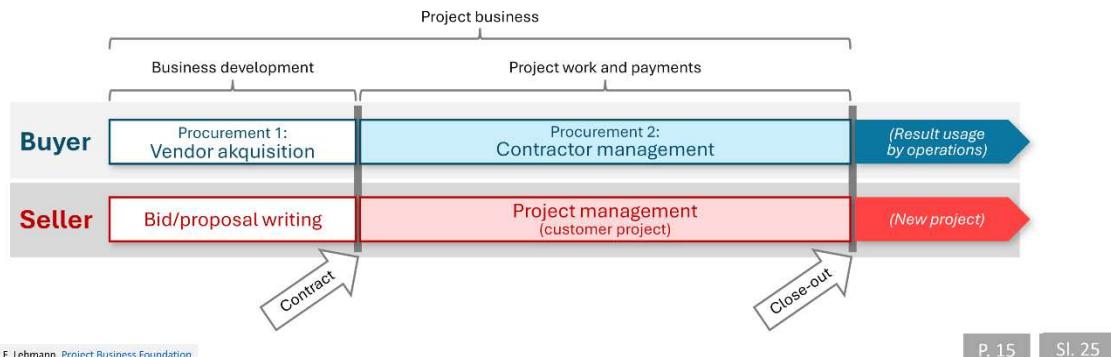
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 116 | Sl. 24

When the Project is the Business

The basic phases

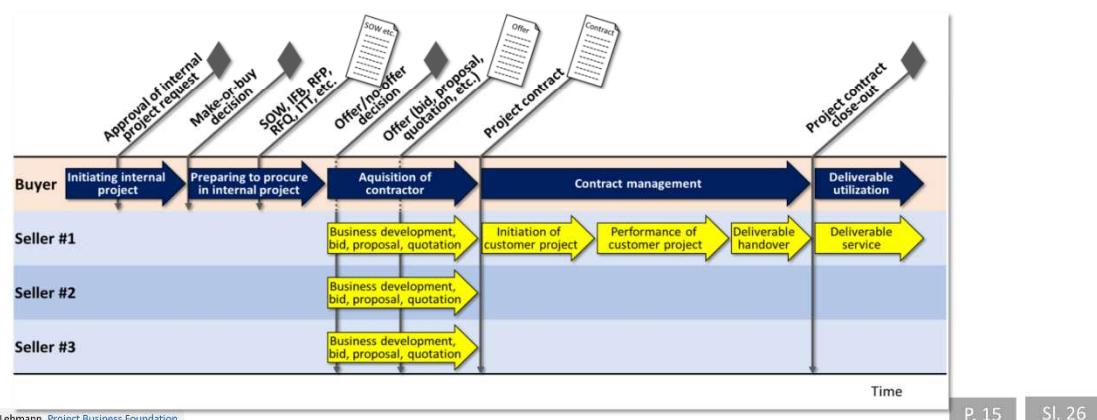
- Before contract conclusion: Business development
- After that: Delivery and services against payment



When the Project is the Business

A closer look: The flow of documents and actions

- Buyer starts the process with the Make-or-Buy decision, choosing the "Buy" option.
- Seller #1 wins the project and becomes the contractor.



When the Project is the Business

A survey

- Performed 08-2021

- N = 326

* 1. On the slider below, which position represents best your *recent experience* for Make-or-Buy decisions in your organization?

Today, we choose MAKE more often than in the past. Today, we choose BUY more often than in the past.

-2 [Clear](#)

* 2. On the slider below, which position represents best your *future expectations* for Make-or-Buy decisions in your organization?

In future, we will choose MAKE more often than today. In future, we will choose BUY more often than today.

3 [Clear](#)

©2023-2025, Oliver F. Lehmann, Project Business Foundation

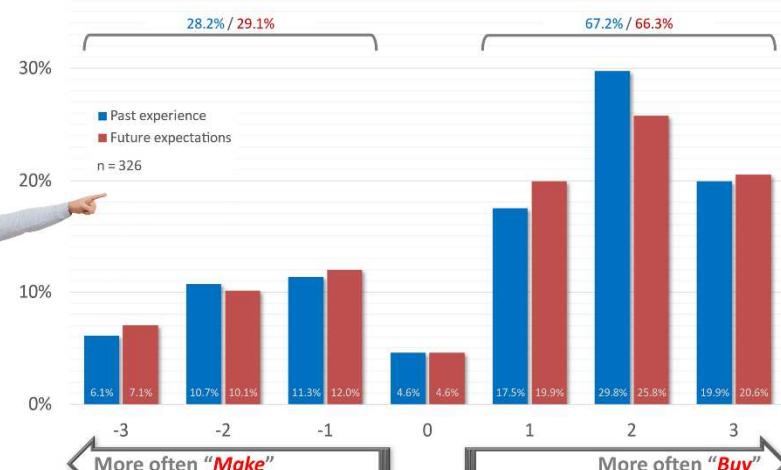
Sl. 27

When the Project is the Business

A survey

Make or Buy in Project Business – What is the Trend?

- Performed 08-2021
- N = 326
- The trend in Make-or-Buy:
 - More often Buy
 - The trend is global and across all industries.



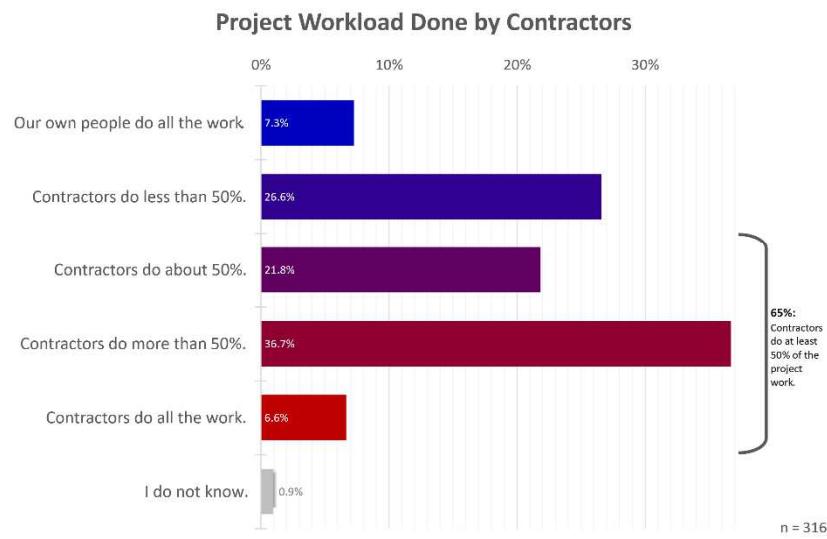
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 54 Sl. 28

When the Project is the Business

Further responses

- 65% said, contractors do at least 50% of the projects' workloads.



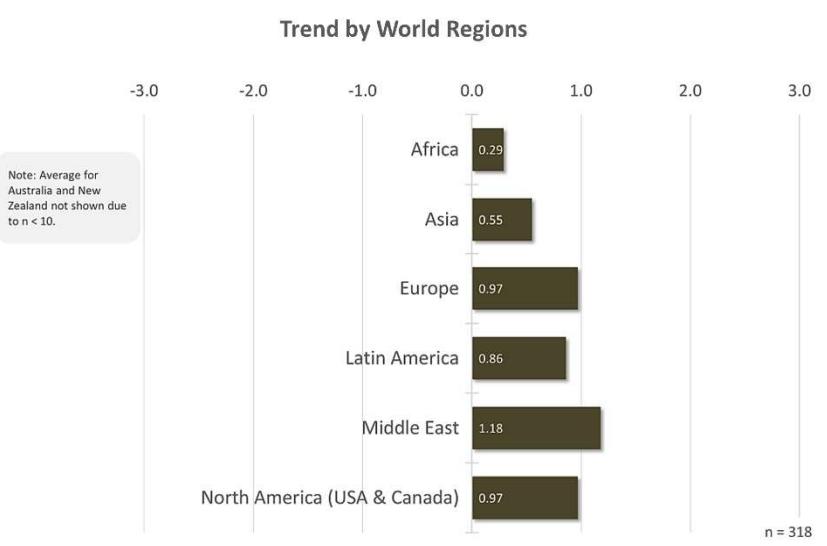
©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 29

When the Project is the Business

More survey details

- Numbers in the diagram are averages from past experiences and future expectations.
- The tendency towards Buy is consistent throughout all world regions



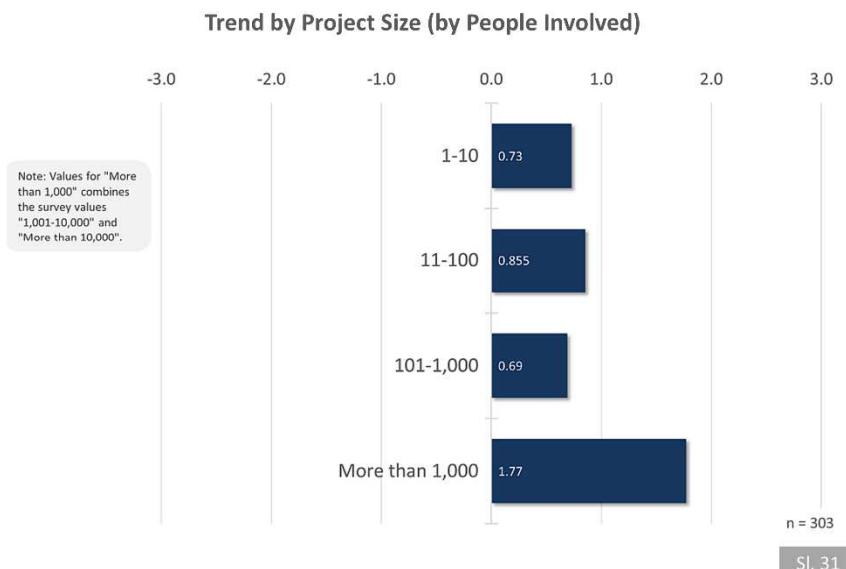
©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 30

When the Project is the Business

The survey, details

- The trend broken down into project sizes, classified by number of people involved during the lifecycles of the projects.
- Buy more often was responded for projects of all sizes.

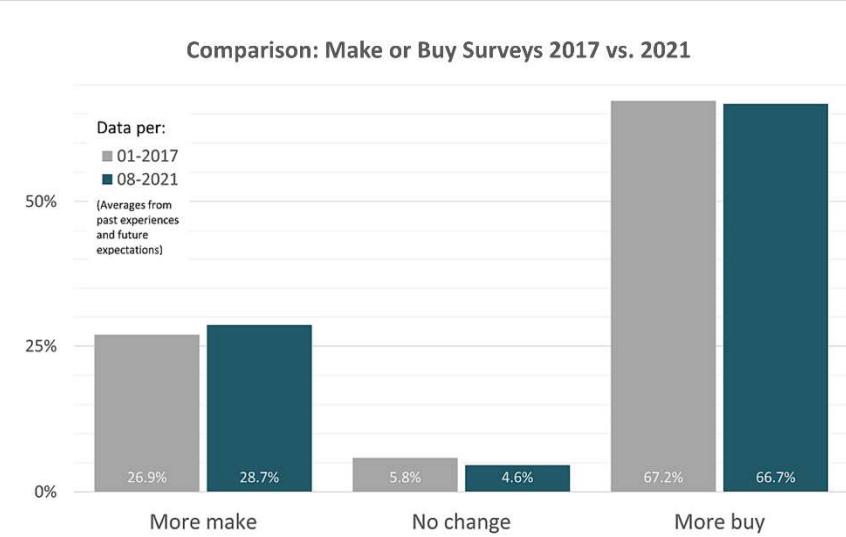


©2023-2025, Oliver F. Lehmann, Project Business Foundation

When the Project is the Business

A confirmation

- Comparison with survey responses collected in 2016/2017
- The pattern is similar.
- The trend is robust.

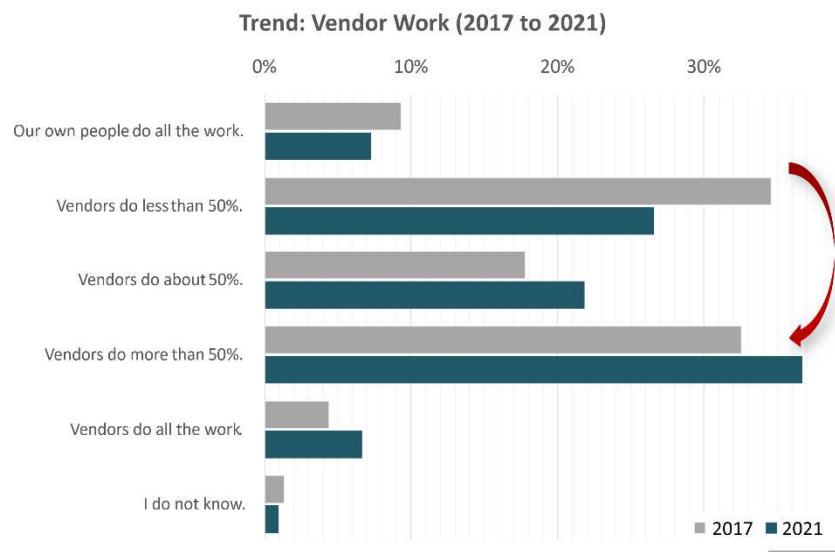


©2023-2025, Oliver F. Lehmann, Project Business Foundation

When the Project is the Business

The trend

- Respondents saying that vendors do less than 50% or nothing in the project:
 - 2017: 44%
 - 2021: 34%
- Respondents saying that vendors do 50% or more of the Project work:
 - 2017: 55%
 - 2021: 65%



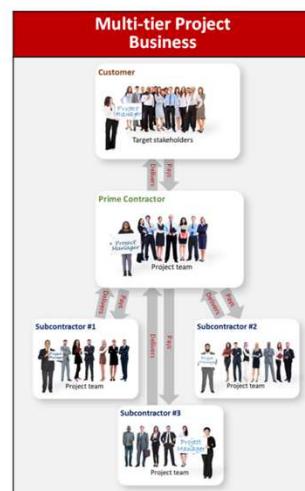
©2023-2025, Oliver F. Lehmann, Project Business Foundation

SI. 33

When the Project is the Business

There are various ways of doing projects

- Internal projects
- Simple project business
- Multi-tier project business

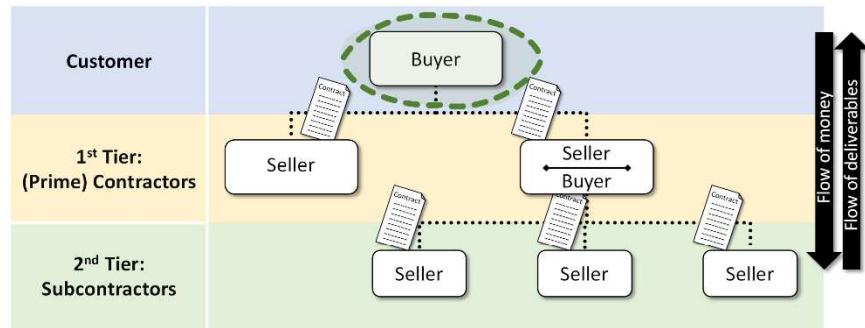


34 ©2025, Oliver F. Lehmann

When the Project is the Business

The Buyer

- Typical obligations:
 - During business development:
 - Approaching and informing sellers.
 - Making sure that all information is available to the seller(s).
 - Under contract:
 - Becomes the customer
 - Making payments.
 - Supporting and supplying the seller, especially after the contract is awarded.
 - Being available for field changes.
 - Coordinating different contractors and dealing with conflicts between them.



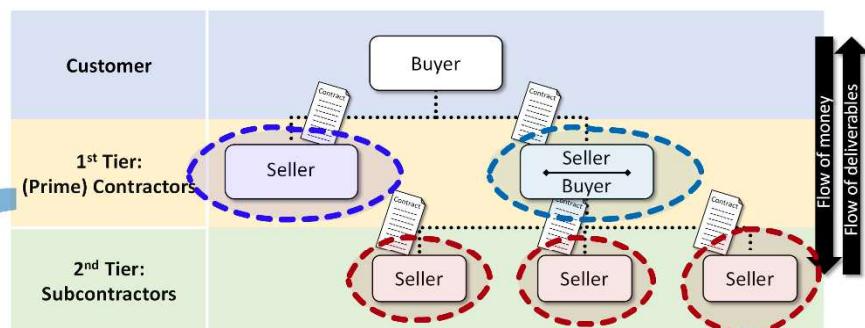
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 16-19 Sl. 35

When the Project is the Business

The Sellers

- When the contract is signed, they become
 - Contractors
 - Prime contractors
 - “Sandwiched” between customer and subcontractors
 - Contractors of the customer
 - Customers of the contractors
- Subcontractors
 - Work for prime contractors



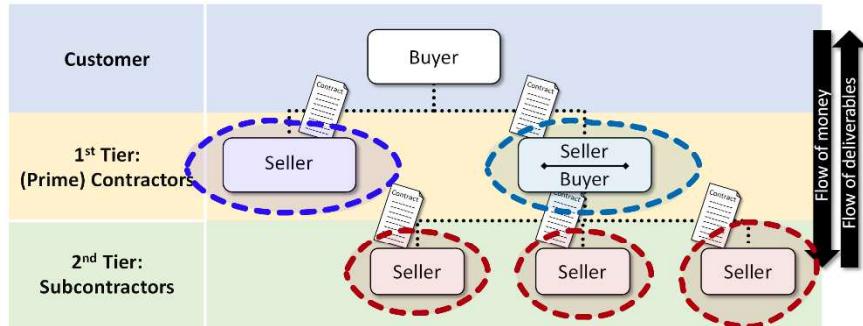
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 16-19 Sl. 36

When the Project is the Business

The Sellers

- Can build complex and dynamic project supply networks (PSNs)
- Typical obligations:
 - Delivering what the customer ordered and is prepared to pay for in accordance with the contract.
 - Providing reports, documentation, and other supplementary information to the buyer in timely fashion.
 - Providing expertise, when it is necessary, and in the areas, where the buyer does not have it.
 - Making the buyer aware of issues as early as possible and supporting the buyer in finding solutions.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 16-19 Sl. 37

When the Project is the Business

Roles

Customer-Side Role	Contractor-Side Role	Comment
Project manager	Project manager	The project manager has the responsibility, alone or shared with a team, to achieve the objectives of the project.
Project sponsor	Project sponsor	The project sponsor is the person who mandates the project and provides the project manager with the authorization to manage it.
Project management team	Project management team	The Project management team supports the project manager in organizational tasks and often shares project success. Each party may have their own project management team or contribute to a joint team that spans project-wide across the organizations involved.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 21-22 Sl. 38

When the Project is the Business

Roles

Customer-Side Role	Contractor-Side Role	Comment
Corporate management	Corporate management	Contracts and other contract-related project business documents bind entire organizations. Corporate managers therefore commonly want to be involved in form of decision points and in developing and finally agreeing them.
Lawyers and counsels	Lawyers and counsels	External lawyers and internal counsels help corporate management to protect the organization from accepting potentially damaging contract clauses and support Alternative Dispute Resolution (ADR) and legal action.
Purchasing or procurement	Sales	Experts for buying (on the customer's side) and selling (on the contractor's side). These are often the first roles involved in developing the project business.
Functional and technical staff	Functional and technical staff	Interact in various ways with the project. Their involvement often grows during the course of the project business and so does their influence on the customer-contractor interface.

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 21-22 Sl. 39

When the Project is the Business

Roles

Customer-Side Role	Contractor-Side Role	Comment
Experts	Experts	Many aspects of today's project business need the involvement of experts, such as data protection and privacy, safety concerns, legal requirements, cross-cultural awareness, and many more.
Contract management	Contract management	Manages the implementation of the contract. They know where the original contract document is, and control access and changes to it.
Claim managers	Claim managers	Analyze the documentation and reports of the project to identify deviations and construed changes that allow for additional demands in money, rework, and other assets.

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 21-22 Sl. 40

When the Project is the Business

Roles

Customer-Side Role	Contractor-Side Role	Comment
Finance	Finance	Ensure timely payment by the customer as well as billing and receipt of payments by the contractor. Provides the fundings for the project.
PMO	PMO (or: PBMO or CoE)	On both sides, a project management office (PMO) helps govern a portfolio of projects by unifying the basic approach, language, processes, documentation, use of software, lessons learned and knowledge bases, and other organizational process assets. As a seller-side Project Business Management Office (PBMO) or Center of Excellence (CoE), tasks are expanded to also include monitoring profitability and liquidity over the entire portfolio of customer projects.

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 21-22 Sl. 41

When the Project is the Business

Many more roles



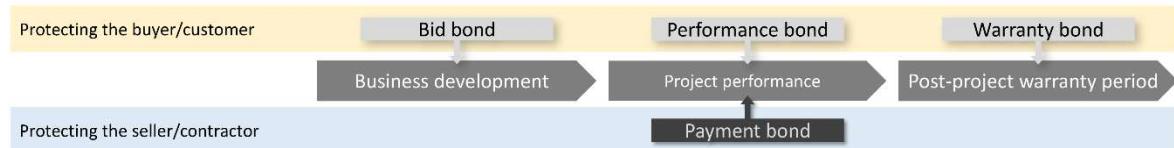
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 21-22 Sl. 42

When the Project is the Business

Some roles in Project Business exist to reduce business risks

- Examples:
 - For large projects, banks, insurers, and surety companies issue:
 - Bid bonds
 - Performance bonds
 - Warranty bonds
 - Payment bonds
 - Sureties can be provided in form of a monetary deposit or other assets used as collateral.
 - A surety company may also require collateral to reduce its own risk exposure.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 22

SI. 43

When the Project is the Business

Profitability and liquidity

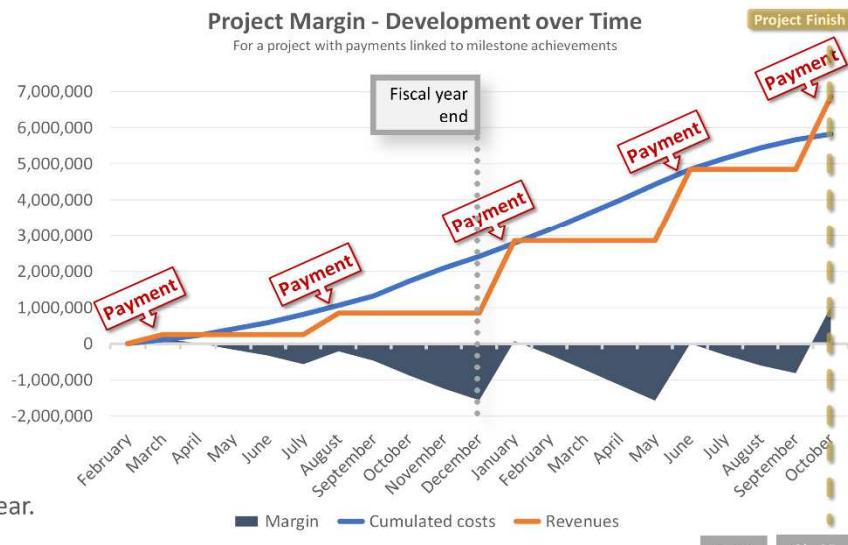
- It is not uncommon that contractors lay out money for the customer.
- The project may be a loss for most of the time, until the last payment brings a positive margin.
- This comes with liquidity risks for the contractor.



When the Project is the Business

More points of concern for the contractor

- Banks may be important players in project business to help overcome liquidity bottlenecks from negative cash flow.
- Shareholders must understand that at the end of a fiscal year, a profitable project may seem to make a loss, because the generation of the profit will be in the next fiscal year.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

When the Project is the Business

Project Business is high-risk business for all parties involved.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

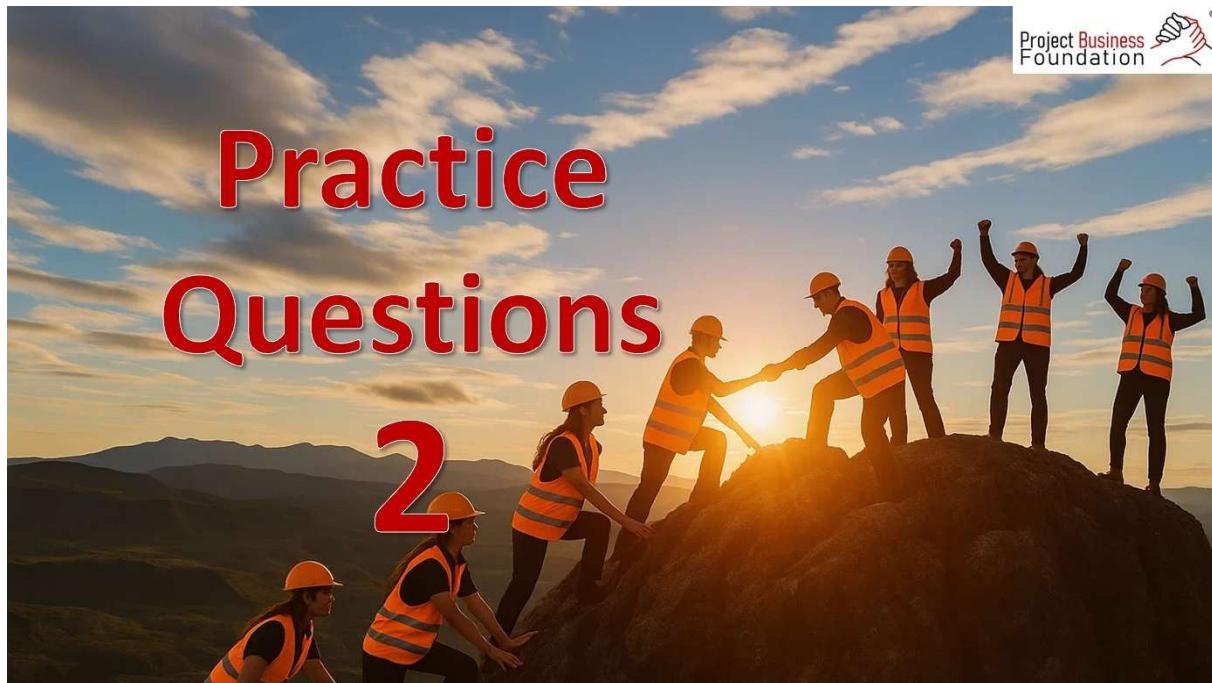
Practical tips for better Project Business Management

- Stay acutely aware: Project business typically is project services and deliveries against money. Performance on all sides matters.
- Take the time it takes to familiarize yourself with the contract.
- Treat Project business as high-risk business.
- Every person in your organization involved in contract projects should be educated in project business management.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

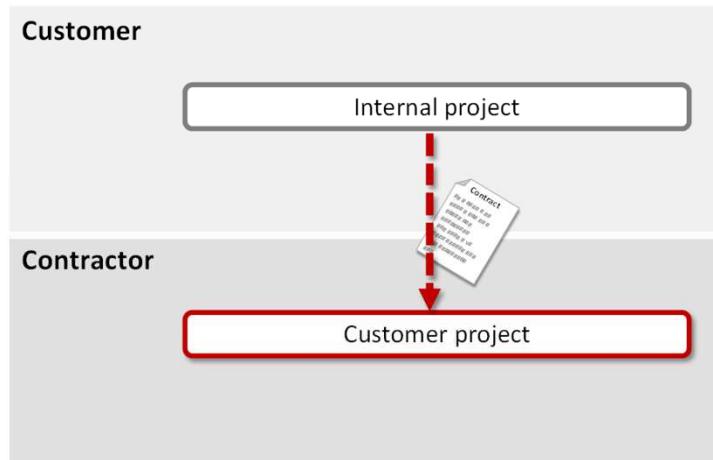
Sl. 47



When the Project is the Business

An outsourced project

- The contractor does the entire project for the customer.
- Also called “Turn-key project”.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

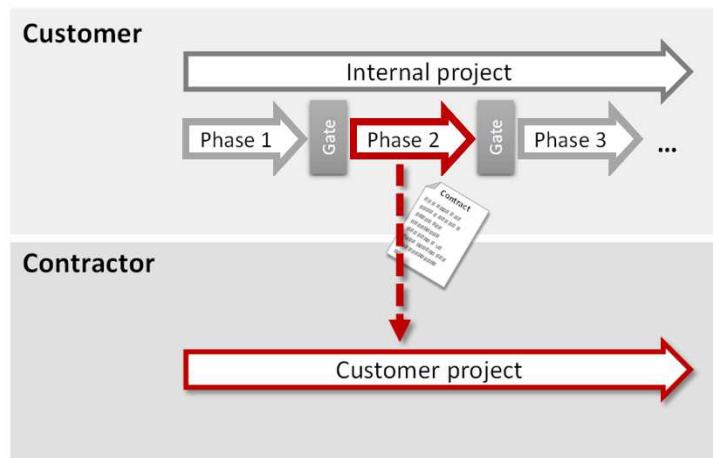
P. 24

Sl. 49

When the Project is the Business

An outsourced project phase

- A project phase has been given to a contractor.
- Other phases may be given to other contractors or done internally by the customer.
- Example - DBB projects in construction: A Design phase is outsourced to an architect or a consulting engineer. During this phase, plans, specifications, bills of materials, etc. are developed, for which in a consecutive Bid phase a construction company is found to implement them in the next phase, Build.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

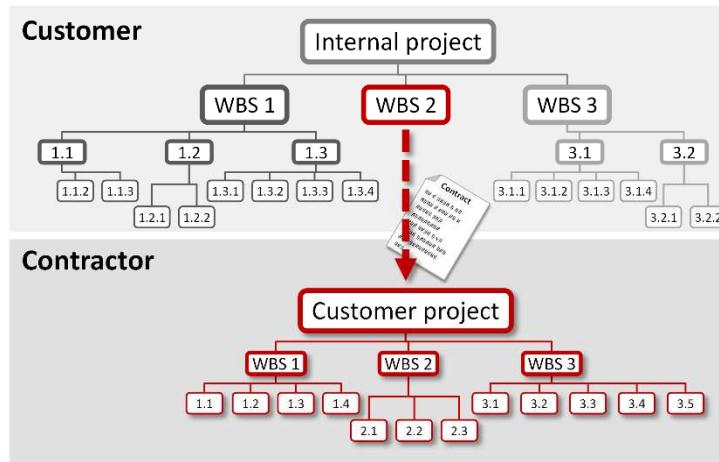
P. 25

Sl. 50

When the Project is the Business

An outsourced WBS item

- The customer has given a higher-level planning package to a contractor.
- For the contractor, it may constitute a complete customer project.



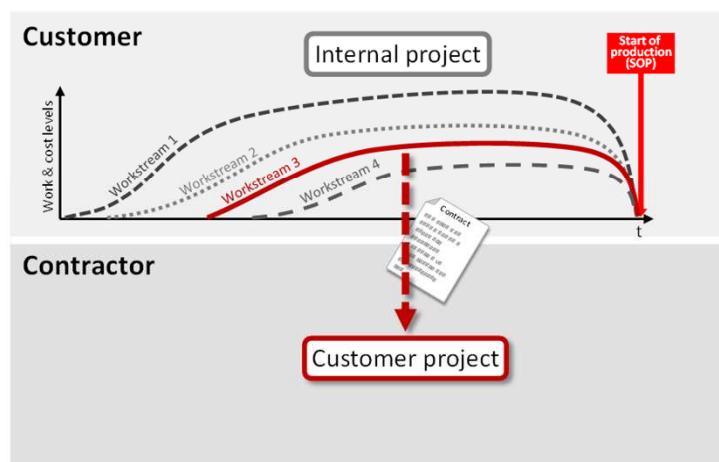
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 26 Sl. 51

When the Project is the Business

An outsourced workstream in the “Rainbow model”

- In the example: Several workstreams in a project are timed to meet a deadline, here a Start of Production (SOP).
- One of the workstreams is done by a contractor.
- For the contractor, the customer's workstream may constitute an entire customer project.



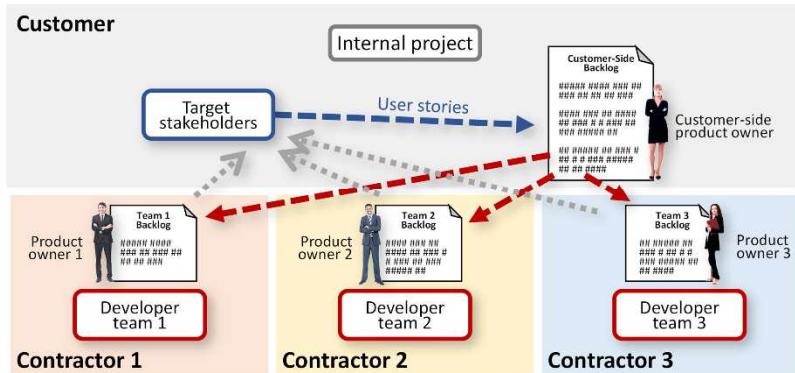
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 27 Sl. 52

When the Project is the Business

Another alternative model, using product backlogs and product owners

- Backlogs and product owners are commonly used in “agile” methods such as “Scrum”.
- In the example, target stakeholders (users, maintenance staff, etc.) fill a backlog administered by a customer-side product owner with user stories (~ tasks).
- The stories are passed on to “proxy” product owners on the contractor side and are then interpreted and completed by the contractors’ developer teams.
- The new functionality is then released for use by the target stakeholders.



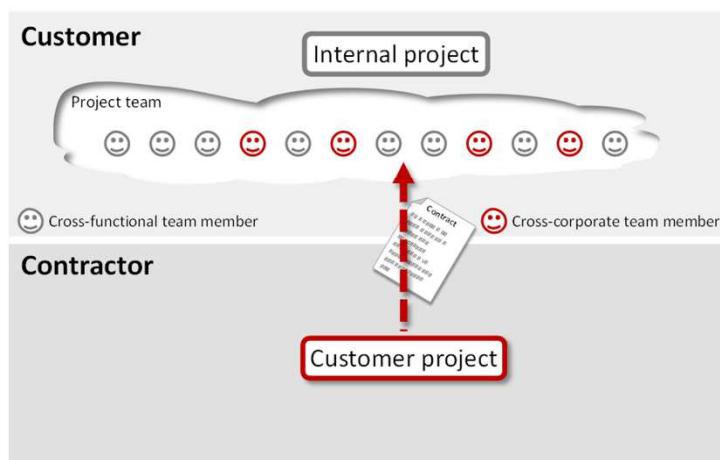
©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 53

When the Project is the Business

A contractor providing additional team members

- Project business management, however, can also take place while the customer retains the control over the work.
- A contractor provides human resources and other assets to the customer.
- From the contractor’s perspective, making these assets available and providing them to the client may constitute another customer project.



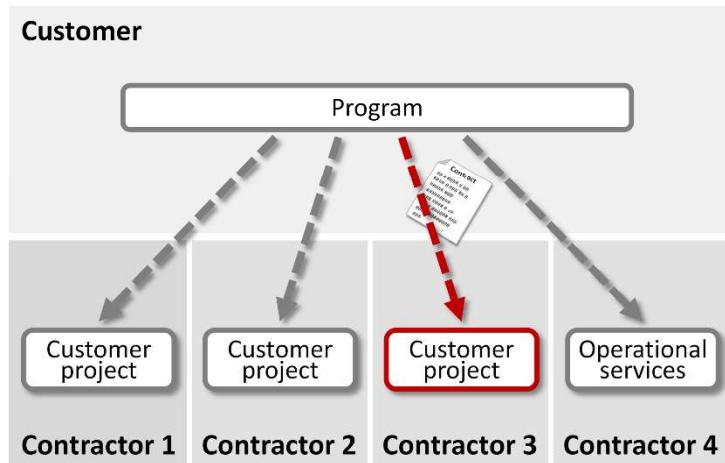
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 28 Sl. 54

When the Project is the Business

A program done by contractors

- In the program, the customer coordinates, consolidates, and integrates a number of projects.
- Some or all of the projects are done by contractors.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 29

Sl. 55

When the Project is the Business

How much legal knowledge do you need?

- How much legal knowledge should a project manager, involved in project business management, have?
- As much as it takes to drive a car
 - safely for yourself and others
 - without coming into conflict with law and regulations
- Just like car drivers, project managers in project business make many small decisions every day. Basic legal knowledge is necessary to make them right.
- For big issues, lawyers should be consulted.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 56

When the Project is the Business

Legal systems

- Legal systems strongly influence contracting.
- There are major differences between
 - Common law
 - Anglo-American Law
 - Allowing for jurisprudence (laws made by judges)
 - Civil Law
 - Based on strict separation of powers and civil codes
 - Other systems, such as
 - Islamic law
 - Party law
 - Mixed legal systems



©2023-2025, Oliver F. Lehmann, Project Business Foundation

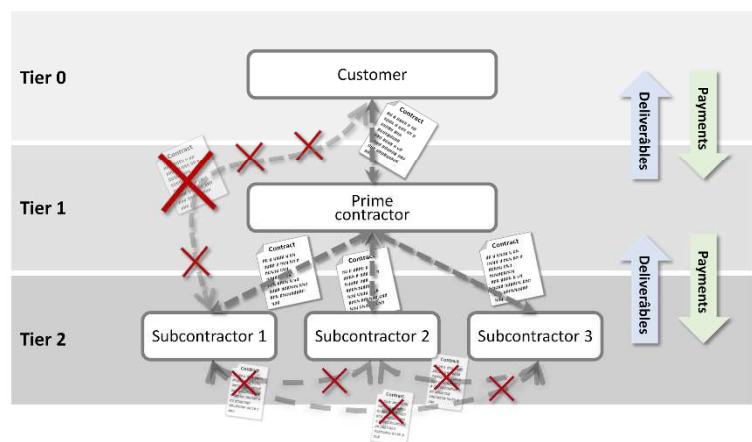
P. 31

Sl. 57

When the Project is the Business

Privity of contracts

- In project supply networks, there commonly is a multitude of non-contractual relationships.
- In the example, the customer has no contractual relationship with the three subcontractors.
- There are also no contracts between the subcontractors.
- However, other relationships still exist, such as
 - Organizational
 - Interpersonal
 - Technical



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 34

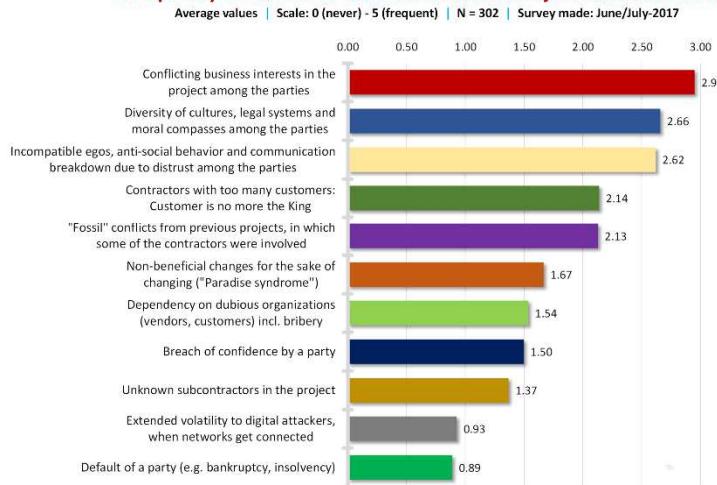
Sl. 58

When the Project is the Business

Conflicts

- The participating parties in project business sometimes run into conflicts.
- A survey shows that the most frequent cause is “conflicting business interests”.
- Further most frequent causes:
 - Diversity of cultures, legal systems, and moral compasses,
 - Incompatible egos, antisocial behavior and distrust,
 - Contractors with too many customers,
 - Fossil conflicts.

Frequency of Causes of Conflicts between Project Contract Parties



©2023-2025, Oliver F. Lehmann, Project Business Foundation

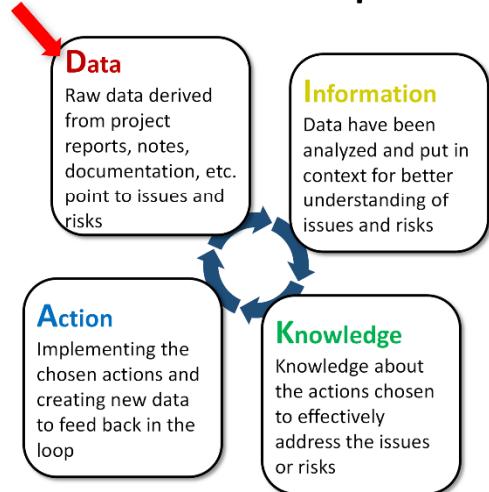
P. 39 Sl. 59

When the Project is the Business

The maturity circle of decision making

- It begins on the lowest level:
Making decisions based on (raw) **Data**
 - “The contractor is late. We will also pay late.”
 - “The customer paid us late. We will delay the delivery.”

The DIKA Loop



©2023 Project Business Foundation

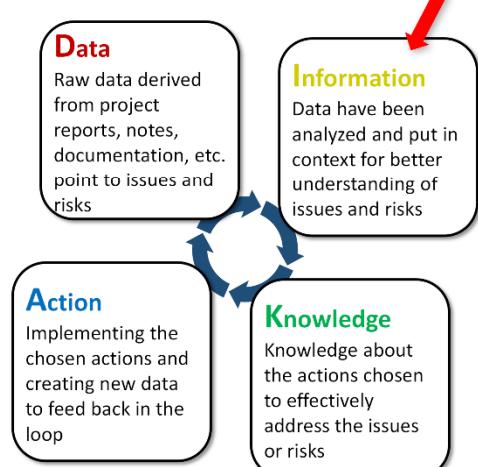
P. 41 Sl. 60

When the Project is the Business

The maturity circle of decision making

1. It begins on the lowest level:
Making decisions based on (raw) Data
2. Second level:
Making decisions based on (interpreted) Information
 - “The reason for the delay on contractor side is understood. We are right to delay payment.”
 - “The customer has developed a habit of paying late. We will respond with a pattern of delayed deliveries.”

The DIKA Loop



©2023 Project Business Foundation

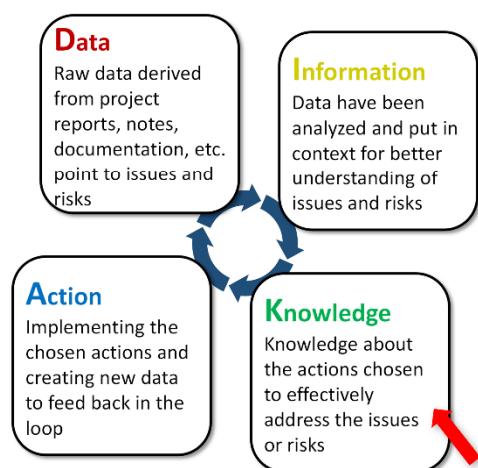
P. 41 Sl. 61

When the Project is the Business

The maturity circle of decision making

1. Lowest level:
Making decisions based on (raw) Data
2. Second level:
Making decisions based on (interpreted) Information
3. Third level:
Making decisions based on (actionable) **Knowledge**
 - “Has someone checked the contract?”
 - “Do we understand what Data/Information are telling us and how we should respond?”
 - “What are possible side-effects of the actions we want to take?”

The DIKA Loop



©2023 Project Business Foundation

P. 41 Sl. 62

When the Project is the Business

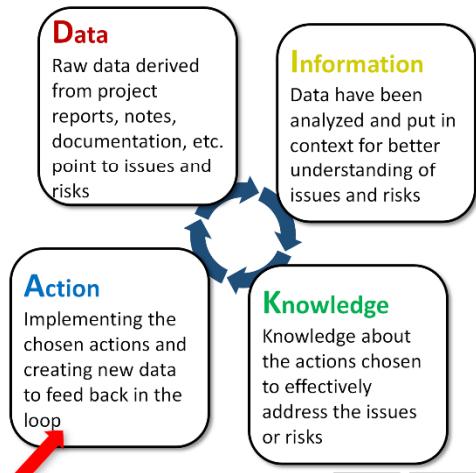
The maturity circle of decision making

1. Lowest level:
Making decisions based on (raw) Data
2. Second level:
Making decisions based on (interpreted) Information
3. Third level:
Making decisions based on (actionable) Knowledge
4. Highest level:
Implementing the decisions from the previous step as **Action**
 - Includes communicating the decisions and tracking the implementation

Action brings new data; the process starts again.

©2023 Project Business Foundation

The DIKA Loop



P. 41 SI. 63

When the Project is the Business

Managing Project Business is challenging

Business acumen

- Skills
 - On customer side
 - On contractor side
- Ability
 - To manage a complex set of business interfaces
 - To follow a “Mission Success First” approach cooperatively with the other parties.

Business spirit

- The necessary
 - Preparedness
 - Willingness
 - Joy
 - Pride
- ... to assume the expanded responsibility of a project manager in project business



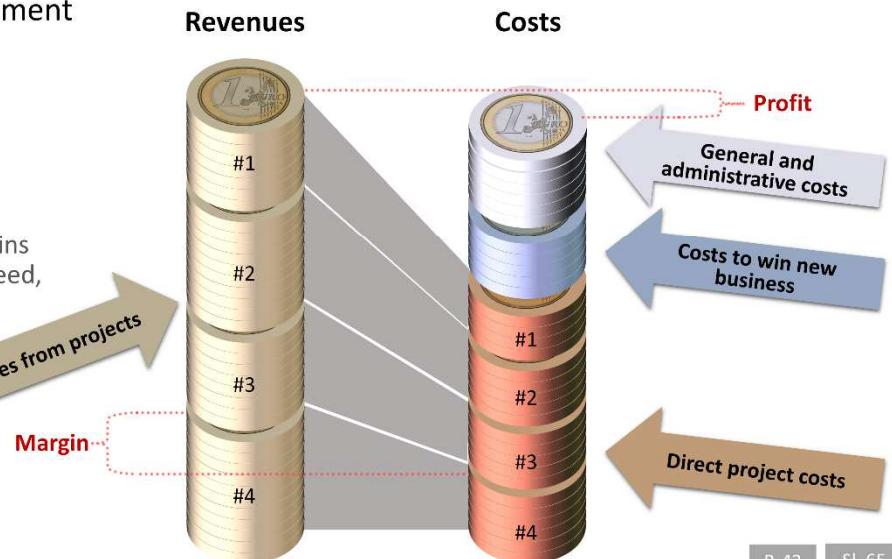
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 41 SI. 64

When the Project is the Business

Profitability management – contractor-side

- Basic cost-profit calculation for a portfolio with customer projects
- Note: Bringing in margins from projects is not greed, it's need.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

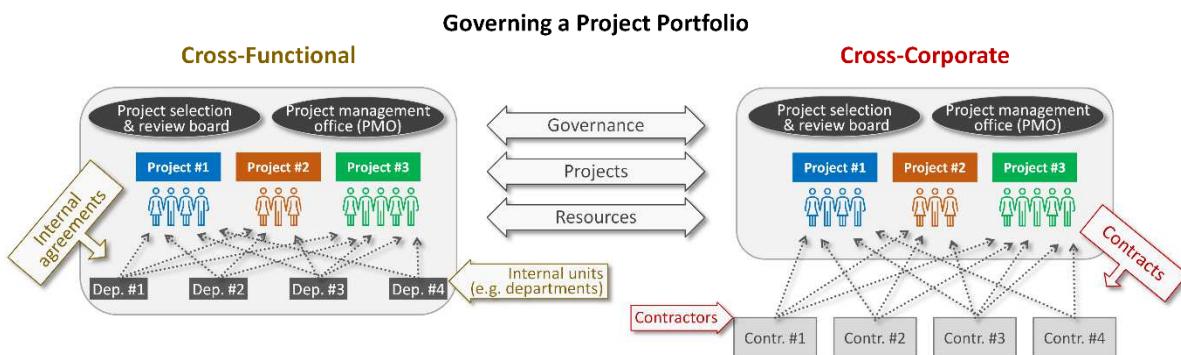
P. 42

Sl. 65

When the Project is the Business

Portfolio management – customer-side

- Organizational process assets must be adjusted for resource assignments
 - Cross-functional: From internal business units
 - Cross-corporate: From external providers



©2023-2025, Oliver F. Lehmann, Project Business Foundation

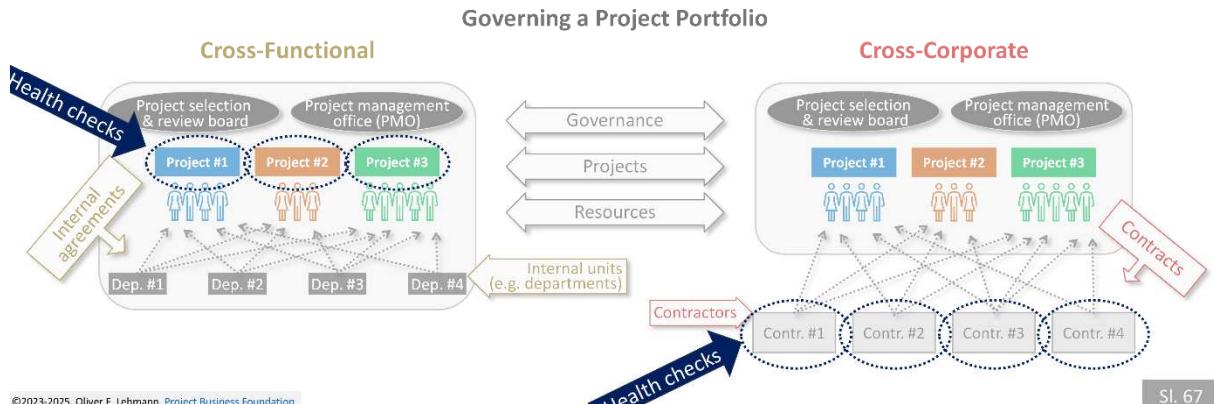
P. 43

Sl. 66

When the Project is the Business

Health Checks

- PMOs often perform Health Checks – Project management audits
- In outsourced project work, the contractors get audited.



When the Project is the Business

Handling conflicts

- Establish a project-wide “Mission Success First” understanding
 - Turn contract parties into project partners
 - Put completing over competing
 - Avoid lawsuits



When the Project is the Business

Alternative dispute resolution (ADR)

- Mediation
 - A trusted mediator helps the parties find a solution.
- Arbitration
 - The arbiter/arbitrator
 - listens to the arguments.
 - proposes an arbitral award.
 - Parties can agree or not.
- Binding Arbitration
 - Based on
 - An arbitration clause in a contract.
 - A regulation or law.
 - The arbitral award by the arbiter or an arbitration tribunal is binding.
 - Similar to a court ruling, but not in public.



*: Terminology may vary dependent on the jurisdiction

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 45

Sl. 69

When the Project is the Business

Project Business Healing Day

- A facilitated 1-day meeting
 - The customer invites members of the Project Supply Network (PSN).
- Addressed are
 - Conflicts
 - Inefficiencies & disruptions
 - Competition
 - Miscommunications
 - Opportunities for improvement
- Objectives
 - Bringing the project back on track
 - Improving communications
 - Ensuring business value for all parties



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 45

Sl. 70

When the Project is the Business

Project Management Audit (“Health check”)

- A trained project management expert is mandated by the customer to review the methods used by the auditee.
- Audits should be contractually agreed upon.
- Audit scope:
 - Appropriateness for the project
 - Compliance with customer requirements
 - Compliance with law, regulations, applicable standards, and other requirements



©2023-2025, Oliver F. Lehmann, Project Business Foundation

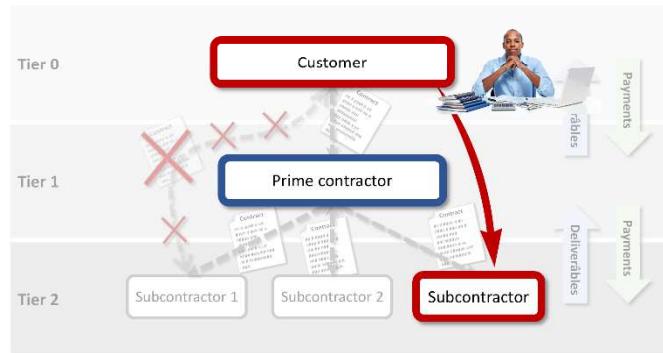
P. 45

Sl. 71

When the Project is the Business

Project Management Audit (“Health check”)

- Another use of Project management audits is to enable approval of a subcontractor by the customer.
- The customer has no contractual relationship with the subcontractor (“Privity of contracts”)
- The contract with the prime contractor may have a clause that the customer must approve subcontractors.
- This may then require that the customer mandates an auditor to assess an organization before the prime contractor can take it under contract for the project.
- Auditors are often third-party too.



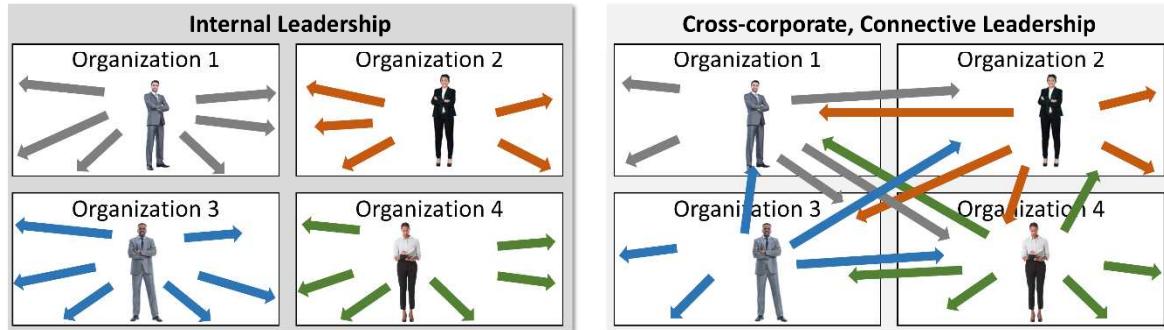
©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 72

When the Project is the Business

Leadership challenges

- Internal projects:
 - Leadership inside a defined realm
 - No overlapping of leadership domains
- Cross-corporate project business:
 - Connective leadership extending borders
 - Leadership domains overlap



©2023-2025, Oliver F. Lehmann, Project Business Foundation

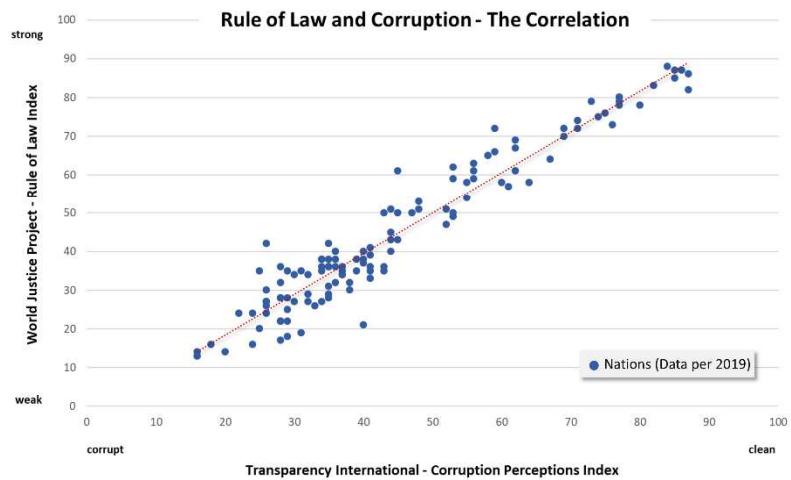
P. 47

Sl. 73

When the Project is the Business

Integrity matters

- Project business risk for all parties increases in countries with weak rule of law.
- Rule of law correlates with perceived public corruption.
- The risk of parties involved in project business grows with corruption.
- Sources:
 - <https://transparency.org>
 - <https://worldjusticeproject.org>



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 49

Sl. 74

When the Project is the Business



The Project Business Foundation's Code of Conduct

- Five elements
 - Ethical norms
 - Accountability
 - Principles
 - Integrity
 - Values

Project Business Foundation - Code of Conduct

09 February 2020

Join



Preamble

As members of the Project Business Foundation, we are prepared and required to subscribe to a set of moral norms, standards, and behaviors as a basis for professional project business. In addition to their impact on the way we do project business, these principles also govern our conduct as members towards other members, the Project Business Foundation, the society, and the environment we live in.

This Code of Conduct is based on five elements:

1. Accepting ethical norms as binding and enforceable
2. Welcoming personal and organizational accountability as a core pillar of ethical norms
3. Upholding moral principles as baselines for ethical norms and accountability
4. Understanding personal integrity as the foundation of ethical norms and behavior
5. Regarding values as the inner core of ethical norms and behaviors

©2023-2025, Oliver F. Lehmann, Project Business Foundation

<https://www.project-business.org/membership/code-of-conduct>

Sl. 75

When the Project is the Business



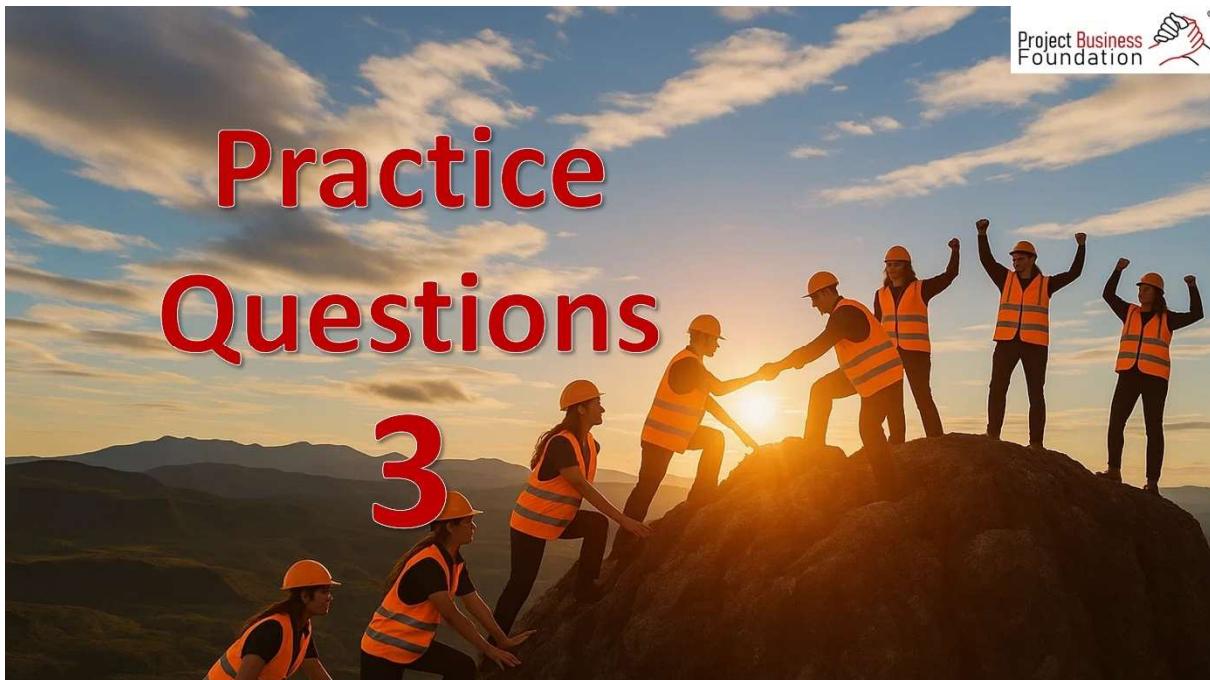
Practical tips better for Project Business Management

- Select carefully, with whom you are prepared to do project business. Poorly selected customers and contractors can jeopardize the project and your organization.
- Take care of the value stream and the cash flow:
 - If you are the customer, make sure that the value gained from contractors' work meets the payments made.
 - As the contractor, know current and forecast future outlays. These outlays are the amount of money by how much you finance your customer's project.
 - Remember that your responsibility includes management disciplines on top of Project Management:



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 76



 <p>PBP Preparation Seminar</p> <p>Project Business Professional</p> <p>The agenda</p> <ol style="list-style-type: none"> Introduction When the Project is the Business Along the Process for Project Business Contract Knowledge and Special Tools Examination 	 <p>The agenda</p> <ol style="list-style-type: none"> Introduction When the Project is the Business Along the Process for Project Business Contract Knowledge and Special Tools Examination 	 <p>The agenda</p> <ol style="list-style-type: none"> Introduction When the Project is the Business Along the Process for Project Business Contract Knowledge and Special Tools Examination
 <p>Project Business Management</p> <p>RULES:</p> <ul style="list-style-type: none"> • Participants • 20 min • 2 hours max <p>The agenda</p> <ol style="list-style-type: none"> Introduction When the Project is the Business Along the Process for Project Business Contract Knowledge and Special Tools Examination 	 <p>The agenda</p> <ol style="list-style-type: none"> Introduction When the Project is the Business Along the Process for Project Business Contract Knowledge and Special Tools Examination 	 <p>The agenda</p> <ol style="list-style-type: none"> Introduction When the Project is the Business Along the Process for Project Business Contract Knowledge and Special Tools Examination

©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 78

The agenda

1. Introduction
2. When the Project is the Business
- 3. Along the Process for Project Business**
4. Contract Knowledge and Special Tools
5. Examination

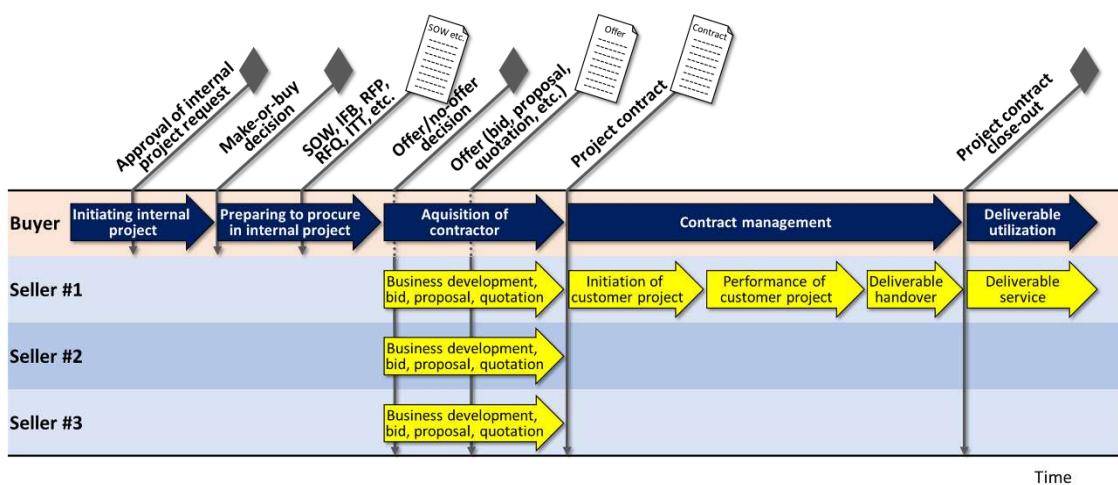


Sl. 79

©2023 Project Business Foundation

Along the Process for Project Business

The overall process (repetition)

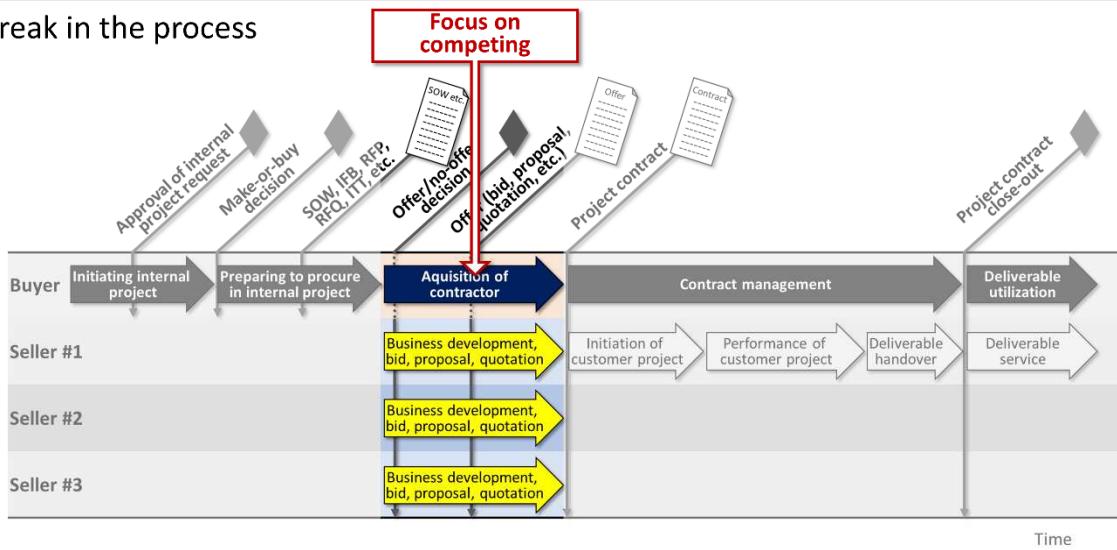


©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 51 Sl. 80

Along the Process for Project Business

A break in the process



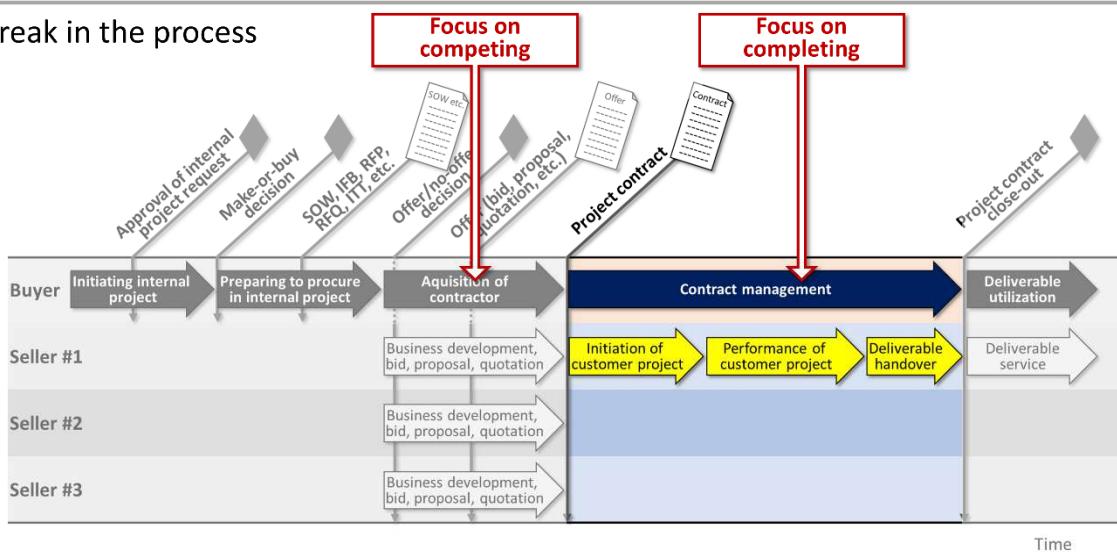
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 52

Sl. 81

Along the Process for Project Business

A break in the process



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 52

Sl. 82

Along the Process for Project Business

Setting the course initially: Project selection and initiation

- Formal process:
 1. Project proposal or request
 - by an internal requestor
 - possibly supported by a business case
 2. Acceptance (or rejection)
 - by top management or
 - by a specific portfolio decision board.
- Informal
 - A manager decides: "I want the project."
- Mandatory requirement
 - By law, regulation, or a key customer



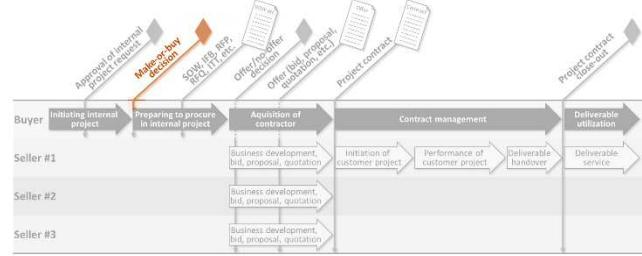
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 53 Sl. 83

Along the Process for Project Business

The Make-or-Buy decision

- When the *Make option* is chosen:
 - The project becomes an internal project.
- When the *Buy option* is chosen:
 - The project will become a customer project for sellers (vendors or service providers).
 - The organization outsourcing the project work will become a buyer.
 - The buyer enters business development.



©2023 Project Business Foundation

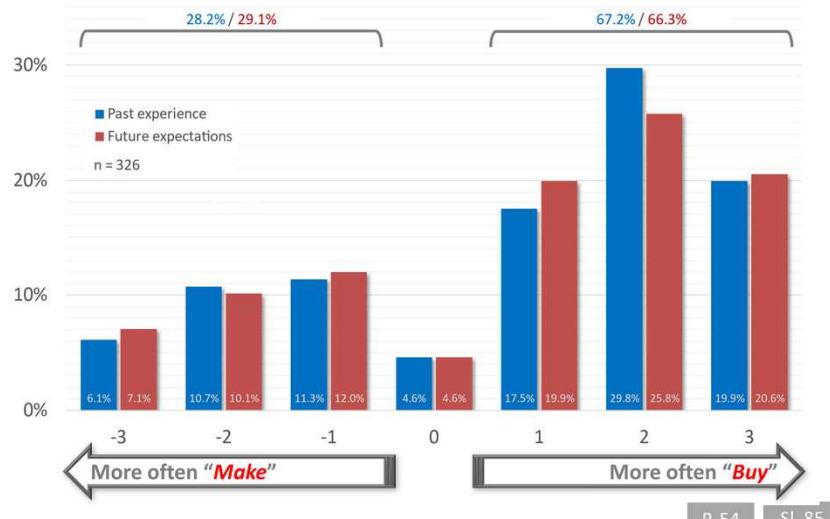
P. 54 Sl. 84

Along the Process for Project Business

A trend

- Repetition from Sl. 24
- A survey with a strong majority:
 - “Buy” option is chosen more frequently

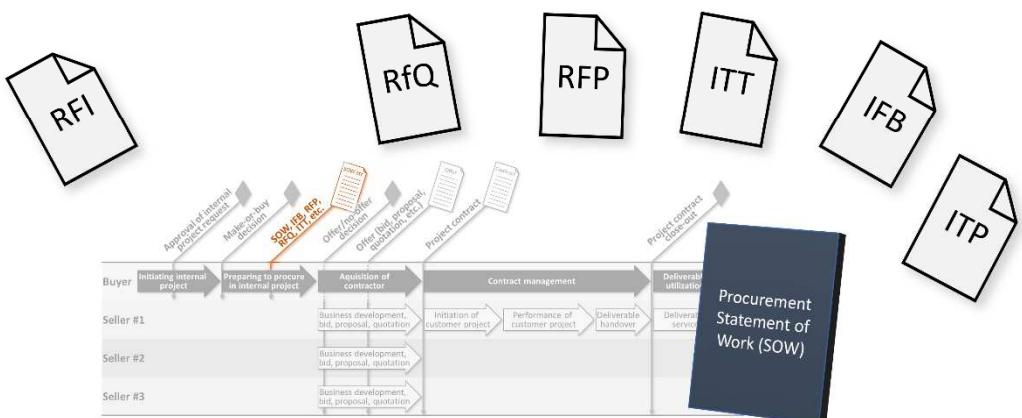
Make or Buy in Project Business – What is the Trend?



Along the Process for Project Business

Developing the business – the buyer side

- Assuming, the buyer makes the first step by
 - Sending a request for responses to one or more sellers (vendors or service providers).



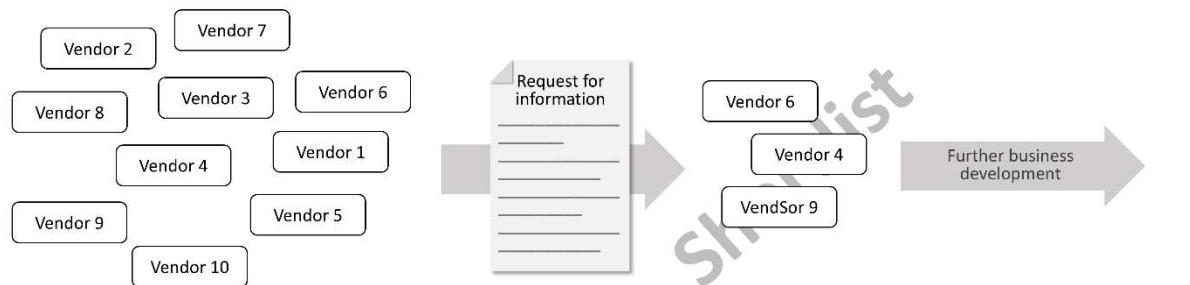
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 54 Sl. 86

Along the Process for Project Business

Request for information (RFI)

- Obtain basic information from vendors and service providers
- Goals:
 - Shortlist sellers.
 - Obtain information on what vendors need to make an offer.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 115 Sl. 87

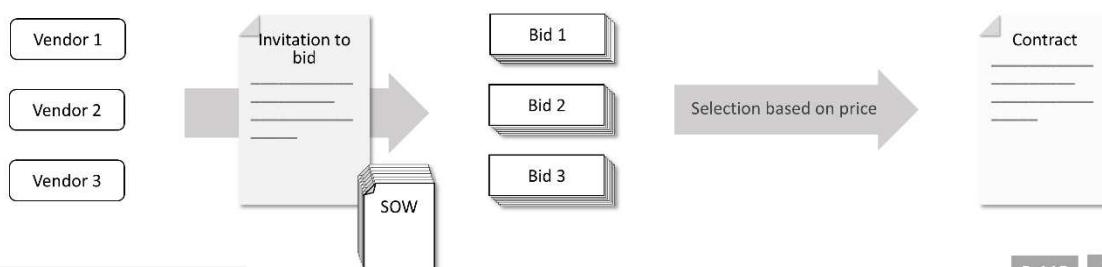
Along the Process for Project Business

Invitation to bid (ITB)

- Enter a price competition among (shortlisted) vendors or service providers.
- Statement of Work (if one exists) specifies the service or product to be procured in high detail.
- Seller selection will be price-driven.

©2023-2025, Oliver F. Lehmann, Project Business Foundation

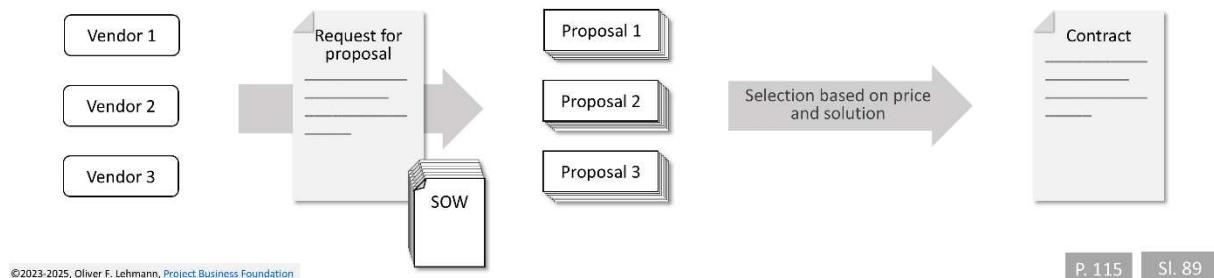
P. 115 Sl. 88



Along the Process for Project Business

Request for proposal (RFP)

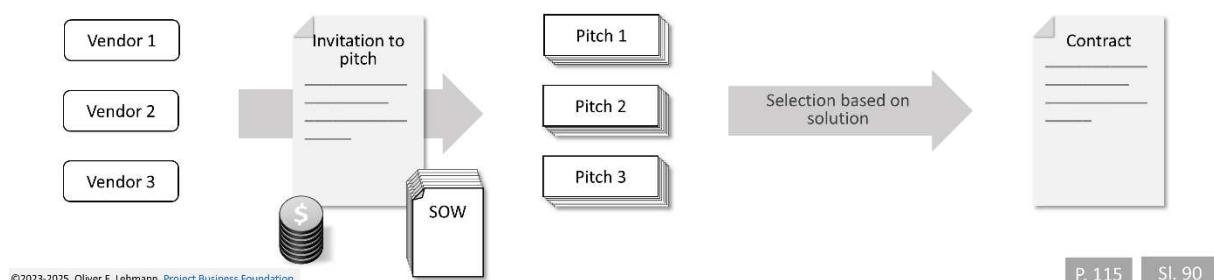
- Enter a price & solution competition among (shortlisted) vendors or service providers.
- Product or service are uncertain for the requester.
- Statement of work (if it exists) focuses on the intended project outcome and achievement.



Along the Process for Project Business

Invitation to pitch (ITP)

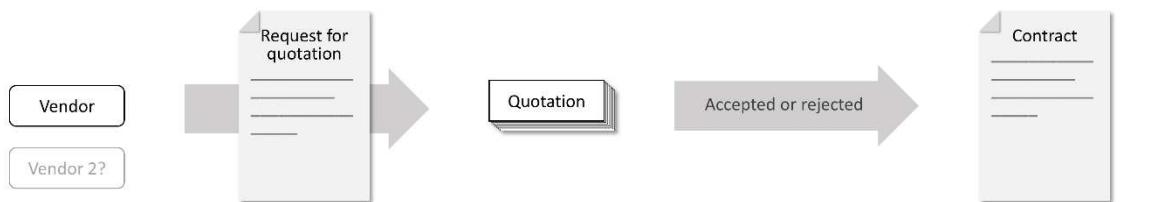
- Enter a pure solution competition among vendors or service providers.
- Product or service is uncertain, but a budget has been fixed and communicated to the sellers.
- Statement of Work (if it exists) focuses on the intended project outcome and achievement and includes the budget.



Along the Process for Project Business

Request for quotation (RFQ), invitation to quote (ITQ)

- May not be competitive at all.
- Common:
 - A preferred vendor is asked for an offer.
 - There may be no competition at all, or one or two other vendors asked as well.
- Typical for small, time-critical procurements from incumbents, often without an SOW.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 115 Sl. 91

Along the Process for Project Business

Types of SOWs

1. Internal SOW

- Developed by an internal requester to describe requirements for the project and its results.
- Improves communications between internal requestor and internal project team.
- As it is internal, it is not an element of project business.



2. Procurement SOW

- Developed by a buyer to support a procurement process.
- Allows product vendors and service providers to develop their bids, proposals, and other forms of offers.



3. Contract SOW

- Sometimes: CSOW
- Part of the contract.
- Not meeting the requirements stated in the SOW has the consequences that the contractor is in breach of contract.



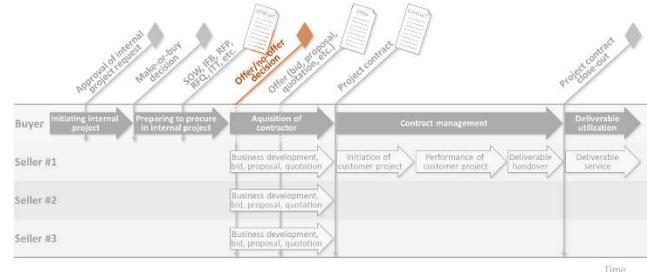
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 115 Sl. 92

Along the Process for Project Business

The offer/no-offer decision – seller side

- Many factors influence the decision, such as:
 - Free capacities
 - The expectation of winning the business. Or losing
 - Will the business will be favorable or detrimental?
 - The expectation on cash-flow challenges
 - The expected stress level from the project
 - The effort that will go into developing an offer
 - Experience with the buyer
 - The creditworthiness of the buyer



©2023-2025, Oliver F. Lehmann, Project Business Foundation

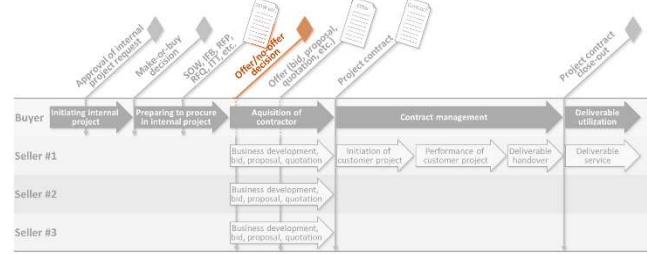
P. 54

Sl. 93

Along the Process for Project Business

The offer/no-offer decision – seller side

- There may be a formal process to decide whether a bid, proposal, etc. is made.
- The process may be informal.
- There may be no process at all. All invitations/requests are responded to with an offer.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

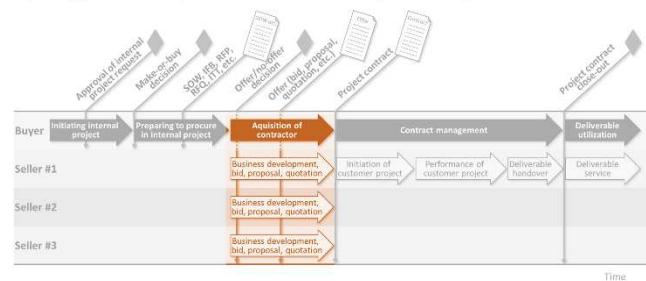
P. 54

Sl. 94

Along the Process for Project Business

Next steps in Business Development

- The parties build a business relationship and get to know each other better.
- Bids, proposals, quotations, and other kinds of offers are developed to inform and convince the buyer.
- The offers are submitted to the buyer.
- After presentations, negotiations, and clarification, the buyer selects the seller.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

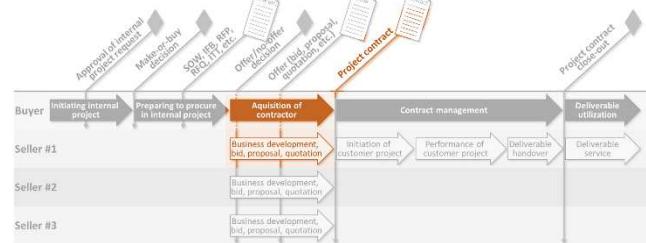
P. 54

Sl. 95

Along the Process for Project Business

The further steps toward concluding the contract

- Contracts are made by
 - Offer (by an offerer)
 - Acceptance (by one or more offerees)



©2023-2025, Oliver F. Lehmann, Project Business Foundation

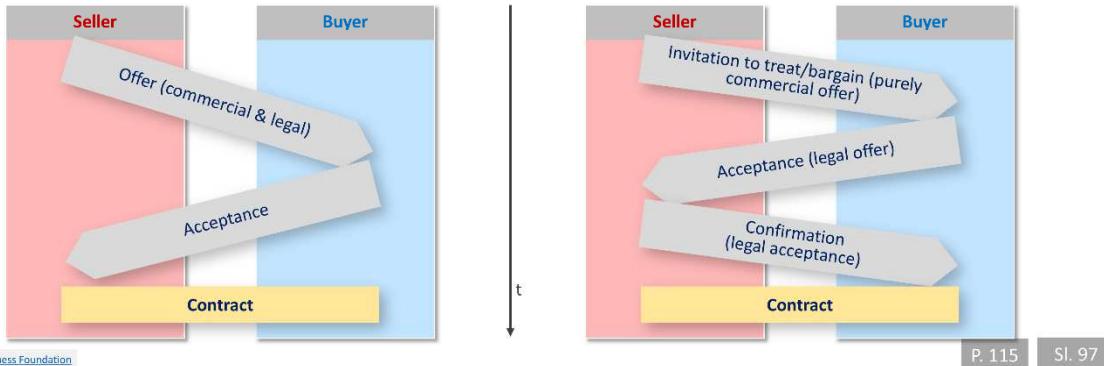
P. 54

Sl. 96

Along the Process for Project Business

Offers may be

- Binding
 - Acceptance by the other party (often the buyer) concludes the contract.
- Non-binding
 - = "Invitation to treat", "invitation to bargain"
 - Acceptance by the customer does not conclude the contract.



Along the Process for Project Business

Requirements on a contract to be valid and enforceable

- Civil law
 - Binding offer & acceptance
 - No illegal or immoral contents
 - Competent parties
 - Possibly: Written form, presence of 3rd party
- Common law
 - Binding offer & acceptance
 - No illegal or immoral contents
 - Competent parties
 - Possibly: Written form, presence of 3rd party
 - Consideration (disadvantages) on both sides
 - Intention to create legal relations



©2023 Project Business Foundation

Along the Process for Project Business

The risks with offers: Hit rates

- %age of offers that lead to business
- Have a major impact on the commercial success of vendors and service providers.
 - Common in new business: Low rates (~10%)
 - Common for incumbents: High rates (~90%)



Along the Process for Project Business

Hit rates

- Impacting factors hurting hit rates
 - Competing offers from other sellers
 - A customer deciding to make internally, often using the know-how gained from the sellers' offers
 - A customer deciding to terminate the project
 - A customer going insolvent during business development



Along the Process for Project Business

Hit rates

- Developing offers is costly.
 - Analyzing the request or invitation, developing a capture strategy
 - Building knowledge about the customer
 - Building rapport with the procuring staff
 - Paying the development team for the bid, proposal, or other type of offer
 - Preparing a presentation (e.g., for a pitch)
 - Allocating internal resources for the project, blocking them from working on other business
 - Possibly: Pre-negotiating with teaming partners
 - Possibly: Buying bid bonds
 - Often: Paying a courier to submit the offer and other costs to meet the deadline
 - Costs of online B2B marketplaces



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 58 | Sl. 101

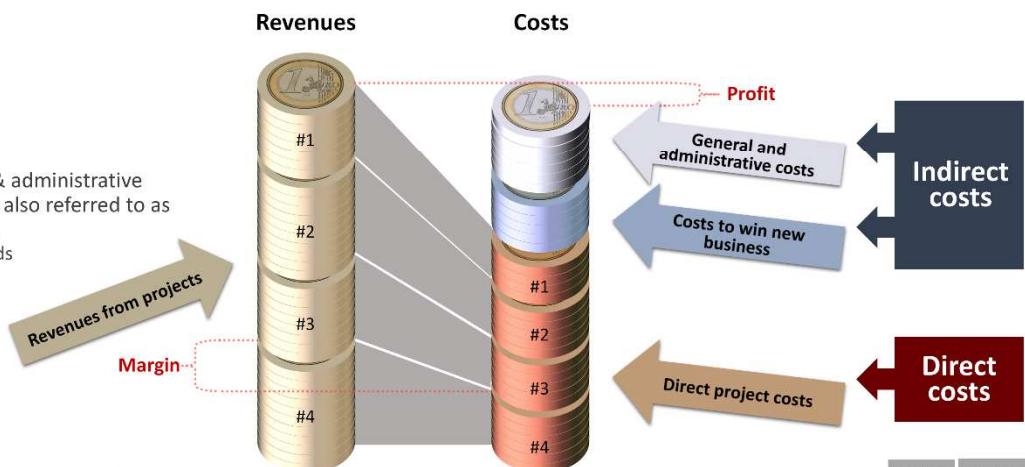
Along the Process for Project Business

Let's talk about money (Repetition)

- Terminology used in marginal costing for customer projects

Note: General & administrative costs (G&A) are also referred to as

- Overhead costs or just overheads
- Facilities and administrative costs (F&A)



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 42 | Sl. 102

Along the Process for Project Business

Let's talk about money

Direct costs include

- Assignable costs for people
- Assignable costs for equipment, office space, and other physical resources
- Materials consumed by the project
- Assignable costs for services
- Assignable fees by government agencies
- Costs of traveling for the project
- Any other assignable expenses



Typical costs to win new business

- Client engagement and networking
- Participation in fairs and conferences
- Proposal writing and submission
- Sales team salaries and commissions
- Lobbying and partnership building
- Advertisement and marketing
- Many others



General & administrative costs (G&A) typically include:

- Management costs
- Organizational
- HR and recruiting
- Project governance incl. PMO
- Accounting and finance
- Legal services
- IT infrastructure and support
- Office rent, utilities, supplies, and services
- And many more



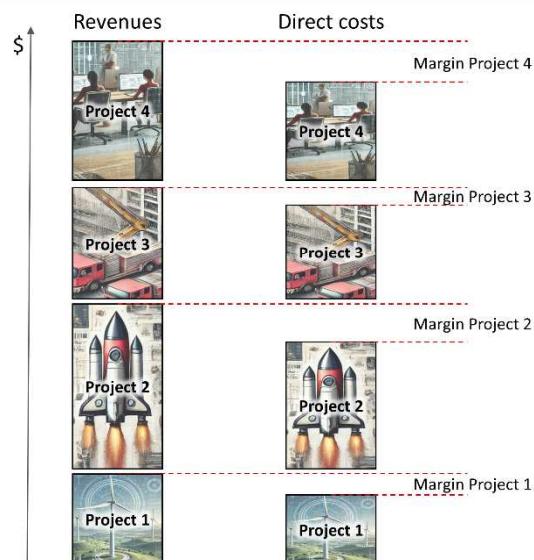
©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 103

Along the Process for Project Business

How marginal costing works

- Projects bring revenues and generate direct costs.
- The difference is called the profit margin, contribution margin, or just the margin.



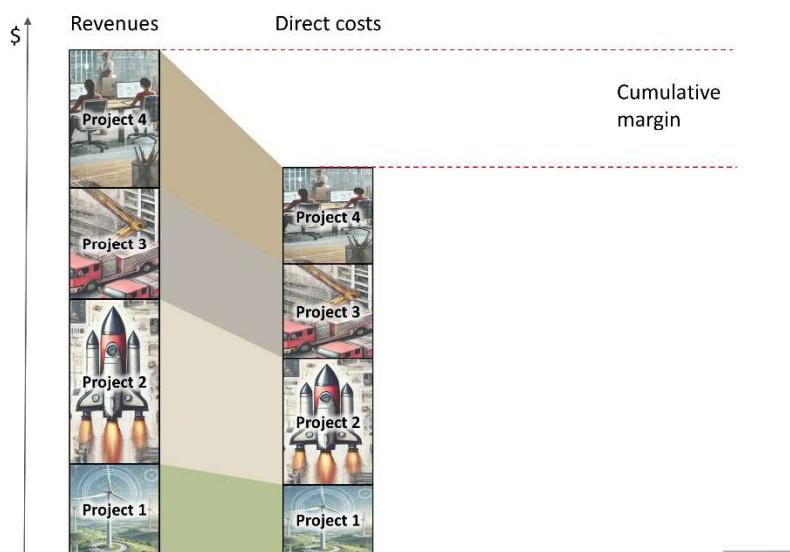
©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 104

Along the Process for Project Business

How marginal costing works

- The cumulative margin from the projects must
 - cover indirect costs
 - generate profit



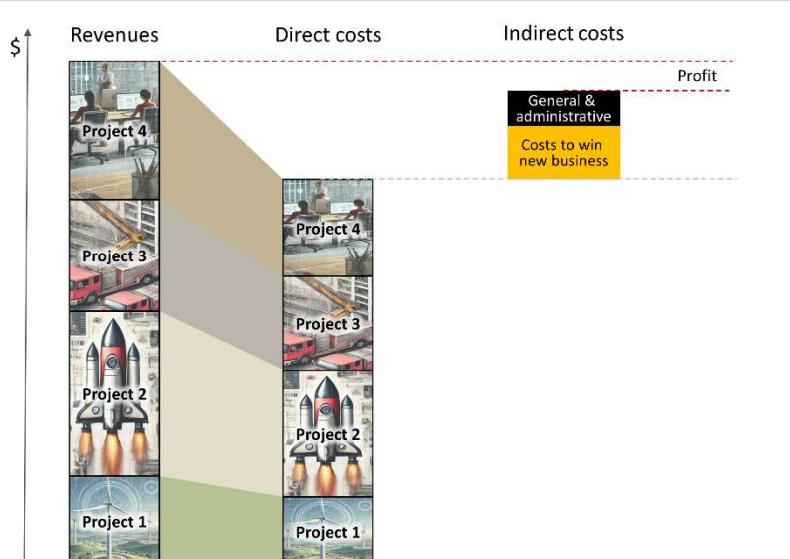
©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 105

Along the Process for Project Business

How marginal costing works

- After deduction of the indirect costs, including
 - G&A costs
 - Costs to win new business
- What remains is the raw profit of the organization



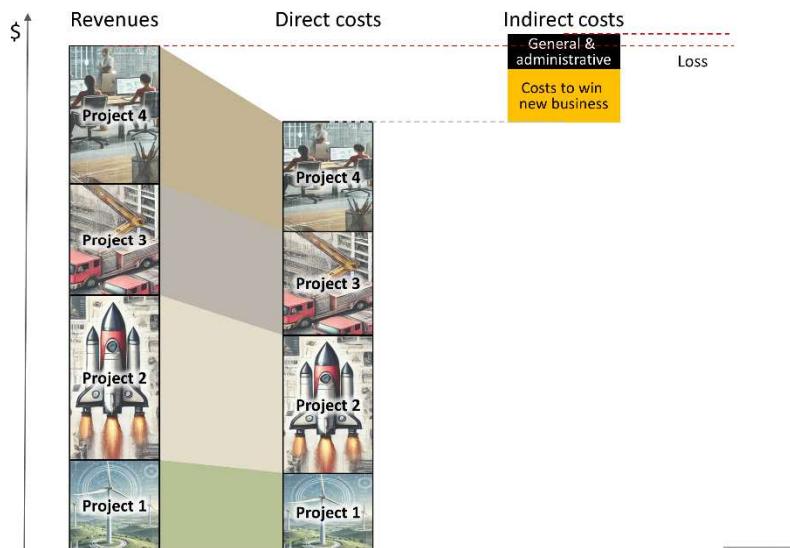
©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 106

Along the Process for Project Business

How marginal costing works

- How poor-performing customer projects can bring the portfolio into a loss.
 - The margins are still positive.
 - But insufficient to cover indirect costs.
 - The organization bleeds money.



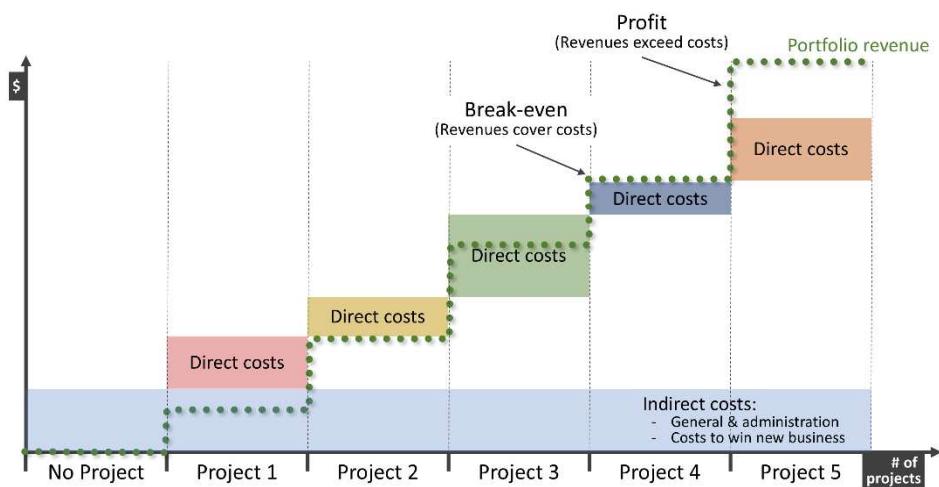
©2023-2025, Oliver F. Lehmann, Project Business Foundation

SL. 107

Along the Process for Project Business

Break-even of a portfolio of customer projects

- The company just sold 5 new projects to replace closed-down older projects.
- The portfolio breaks even at the 4th project.
- It is profitable at the 5th project.



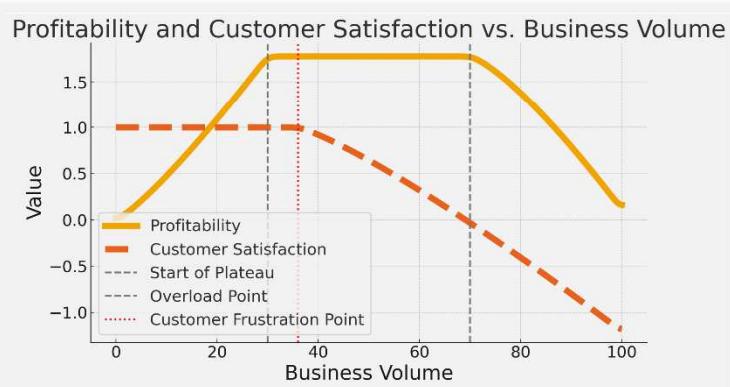
©2023-2025, Oliver F. Lehmann, Project Business Foundation

SL. 108

Along the Process for Project Business

Overshooting the break-even

- The company just sold more new projects and filled the portfolio.
- At one moment, it was surprised to find profitability no longer growing.
- Further growth of the business even led to decreasing profitability.
- At one point, customer happiness also went down, when contractor performance decreased due to much competition with other projects.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 109

Along the Process for Project Business

Losing offers

- Lack evidence of understanding of the prospect's specific business needs and wishes.
- Propose solutions based on what the seller prefers to sell.
- Use a lot of boilerplate, one-size-fits-all template text, and gobbledegook.
- Are shy of signals that demonstrate the prospect will be in good hands.
- Boast about how good the seller is, not how good they make their customers.
- Don't give a compelling reason to choose your recommendation over any other proposals.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 60 Sl. 110

Along the Process for Project Business

Winning offers

- Demonstrate the seller's ability to deliver on time and budget, but also to increase the prospect's business agility and adaptiveness.
- Avoid excessive documentation, instead dig deep into what the prospect cares about.
- Choose text, data, and images diligently to communicate a unique value proposition.
- Provide evidence that the seller will deliver what is desired and needed.
- Communicate the skills and successes of the company in a way that communicates professionalism without boasting.
- Gives evidence the prospect will be in good hands as a project customer.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 60

Sl. 111

Along the Process for Project Business

Offer presentations

- Put the buyer at ease.
- Serving cookies helps, even if you are not the host.
- Preparation and the ability to improvise matter.
- Rehearse the presentation before you show it.
- Be prepared for difficult questions, including the popular "Can you tell us the reason, why we should choose you?"



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 60

Sl. 112

Along the Process for Project Business

Offer presentations

- Be prepared for technical problems. Have reserves in place for
 - Presentation PC
 - Adapters
 - Other necessities
- If you include practical demonstrations in the presentation, ensure they will work.
- Use language that the customer understands.
- Exclude boastful superlatives and “gobbledygook”.
- Use humor carefully.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 60 Sl. 113

Along the Process for Project Business

Your 3 competitors during business development (vendor-side)

1. Competing sellers
2. The decision of the buyer to not do the project at all
3. The decision of the buyer to use the lessons learned from the offers and do the project internally with own staff.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 61 Sl. 114

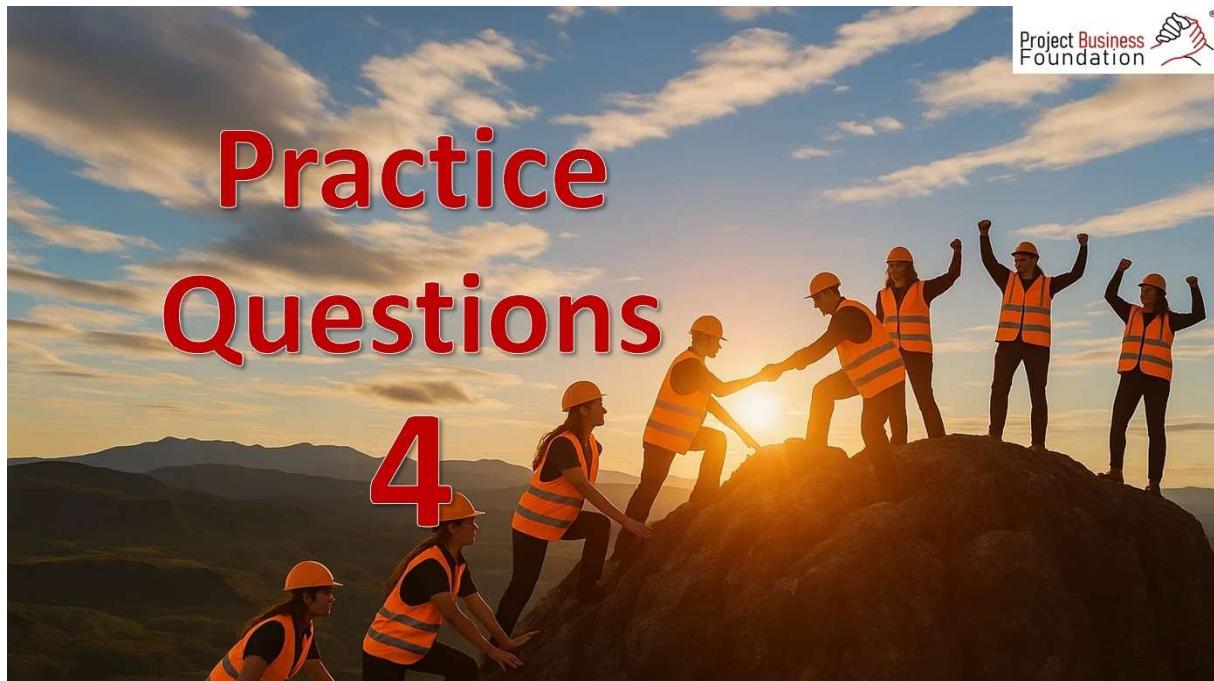
Practical tips for better Project Business Management

- As a seller, you do not want to win every bid, proposal, etc.
- As a customer, remember that you are “too poor to buy cheap”.
- Select your future customer or contractor carefully, but once you made the decision, make sure to implement it and win the business.
- Remember the three domains you must perform in project business, on top of project management:
 - Relationship management
 - Business management
 - Legal management



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 115



Along the Process for Project Business

Reverse auction

- A method of negotiation
 - Asking for offers in a round robin setting
 - The cheapest seller wins



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 62 Sl. 117

Along the Process for Project Business

Seller selection

Weighting System

Criteria	Weight (1-10)	Vendor A		Vendor B		Vendor C	
		Rating*	Scores**	Rating*	Scores**	Rating*	Scores**
Vendor							
Technical capability	9	6	54	4	36	9	81
Success record	7	10	70	3	21	4	28
Financial status	8	7	56	5	40	9	72
References	3	2	6	6	18	0	0
Total vendor score			186		115		181
Offer							
Managerial approach	5	6	30	5	25	9	45
Technical approach	9	2	18	8	72	9	81
Longterm TCO***	10	3	30	8	80	6	60
Total offer score			78		177		186
Total score				264	292	292	367

*: Scale 0 - 10

**: Score = Weight * Rating

***: Total Cost of Ownership

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 62 Sl. 118

Along the Process for Project Business

Seller selection

Screening System			
Criteria	Vendor A	Vendor B	Vendor C
Vendor			
Evident technical capability	X		X
Shown success record	X	X	
Sound financial status	X	X	X
References presented	X		
Total vendor score	4	2	2
Offer			
Convincing managerial approach	X		X
Convincing technical approach		(D)	X
Attractive longterm TCO*	X	X	X
Total offer score	--	2	3
Total score	--	4	5

*: TCO – Total cost of ownership

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 63

Sl. 119

Along the Process for Project Business

Necessary elements of a project contract

1. **Parties to the contract**
 - Organizations and individuals, who entered into the contract and committed to the obligations laid down in it.
2. **Contract items**
 - The deliverables and services that the contractor(s) must deliver and provide.
3. **Price and payment terms**
 - The price that the customer(s) is(are) prepared to pay, incl. the scheme for paying it.
4. **Consideration (Common law, Islamic law)**
 - Obligations, costs, risks, and other disadvantages that parties accepted when they entered the contract.
5. **Change process**
 - The process for changes to the project incl. changes to contract items, price, and terms and conditions.
6. **Applicable law and place of jurisdiction**
 - Avoiding uncertainty about the law and jurisdiction under which the contract is to be fulfilled
 - Signaling the intention to create legally valid relations.
7. **Terms and conditions**
 - Integral elements of the contract including
 - Provisions
 - Processes
 - Arrangements
 - Rules
 - Roles
 - Constraints
 - Standards, etc.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 64

Sl. 120

Along the Process for Project Business

The project contract

- Ends business development.
- Guides the project until its end.
- Often includes clauses that will guide the time after its close-out



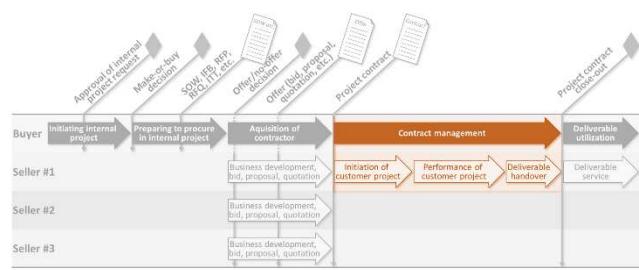
©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 121

Along the Process for Project Business

Working under contract

- One of the sellers has won the business. This comes with revenue opportunities for the company, but also with obligations.
- It is the time when the parties can join forces and be successful, or frustrate each other.
- It is the time when the parties should act as partners and follow a joint mission.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 63 Sl. 122

Along the Process for Project Business

The project contract

- Delineates obligations, typically including:
 - Contractor side
 - Timely and complete deliveries and services
 - Customer side
 - Timely and complete payments
 - Provisions and enabling services
 - Provisions: Deliveries by the customer
 - Enabling services: Services by the customer



©2023-2025, Oliver F. Lehmann, Project Business Foundation

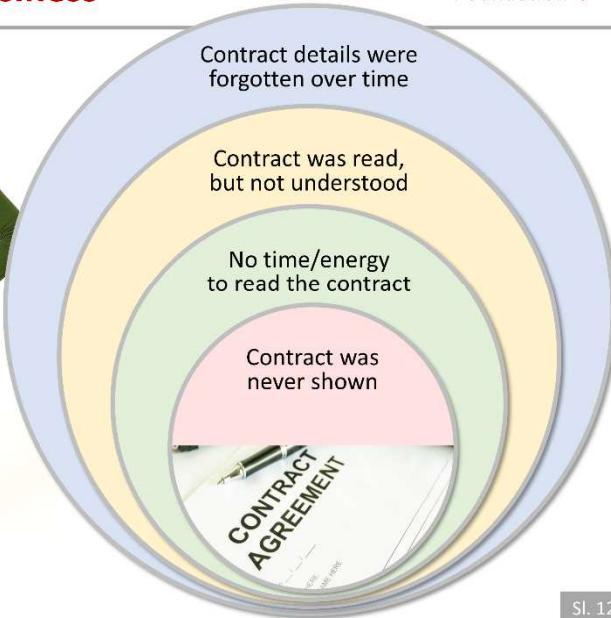
P. 64

Sl. 123

Along the Process for Project Business

The project contract

- Often, project managers don't know the contract.
- Project managers working under contract have to ensure that parties meet their contractual obligations.
- This is impossible without knowing the contract.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 124

Along the Process for Project Business

The project charter

1. Project manager authorization
 - Mission critical, when the project manager's authority conflicts with the authority of functional managers.
2. Project sponsor and other supervisors
 - The individual manager authorizing the project and its project manager; the managers providing funds, people, space, and other resources. Ideally: The project's champion.
3. Project mission
 - The underlying wants or needs that the project and its results shall help the organization achieve.
4. Initial objectives, scope, team, schedule, budget, constraints, assumptions, risks, etc.
 - The propositions upon which the project is founded and initiated.
5. Reference to project contract
 - For customer projects: Contractual obligations, organizational interfaces, responsibility for profitability and liquidity.



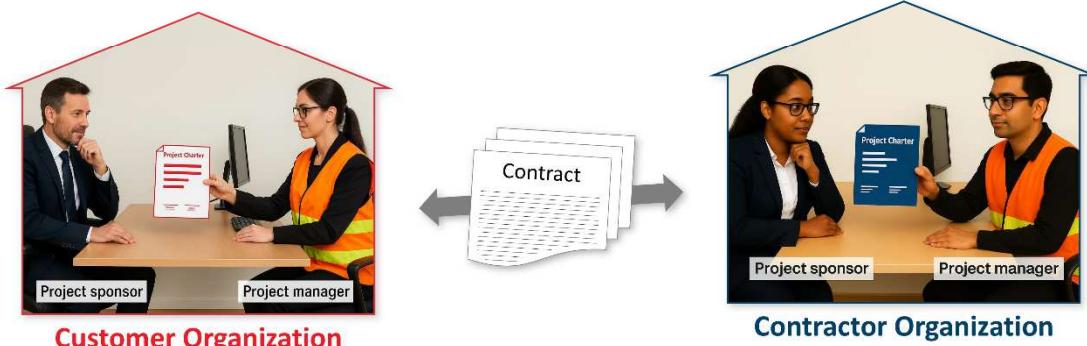
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 65 Sl. 125

Along the Process for Project Business

Business aspects of Project charters and Project contracts

- A project charter is a power transfer.
- When done right, it doesn't just describe work; it rewrites organizational dynamics.
- A project contract links two or more organizations and turns project management into Project Business.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 66 Sl. 126

Along the Process for Project Business

Refining contract and project charters: Management plans

1. Planning processes

- Processes, roles, responsibilities, timing, acceptance, location, budget, etc. for cross-corporate development of schedules and other plans.

2. Acceptance processes

- Processes, roles, responsibilities, timing, location, budget, etc. for cross-corporate acceptance of deliverables.

3. Safety procedures

- Processes, roles, responsibilities, timing, location, budget, etc. for cross-corporate protection of people as well as data, know-how, buildings, and other assets.

4. Compliance rules

- Laws, regulations, standards, specifications that the cross-corporate project needs to meet and who is in charge for meeting them.

5. Basic metrics used

- Unified metrics used across the project by all parties.

6. Change processes

- Processes, roles, responsibilities, timing, acceptance, location, budget, etc. for cross-corporate changes to schedules and other plans.

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 67

Sl. 127

Along the Process for Project Business

Management plans

• Examples

- Scope management plan
- Schedule management plan
- Cost management plan
- HR management plan

• Delineate cross-corporate

- Project success strategy
- Funding, staffing, and timing of management efforts
- Decision roles and processes
- Communication channels
- Information radiators
- Day-by-day conflict resolution



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 67

Sl. 128

Along the Process for Project Business

The Mission Statement: Delineating a unifying joint mission

- Concise purpose
 - A very short statement that is understandable and points to the underlying driver(s) that brought the project into existence.
- Unifying goal
 - A success condition or result that brings benefits to all parties involved.
- Criteria for pride
 - The positive experience that generates positive emotions towards the project and its results. Domain of validity
- Organizations and individuals
 - who are expected to adopt the mission.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

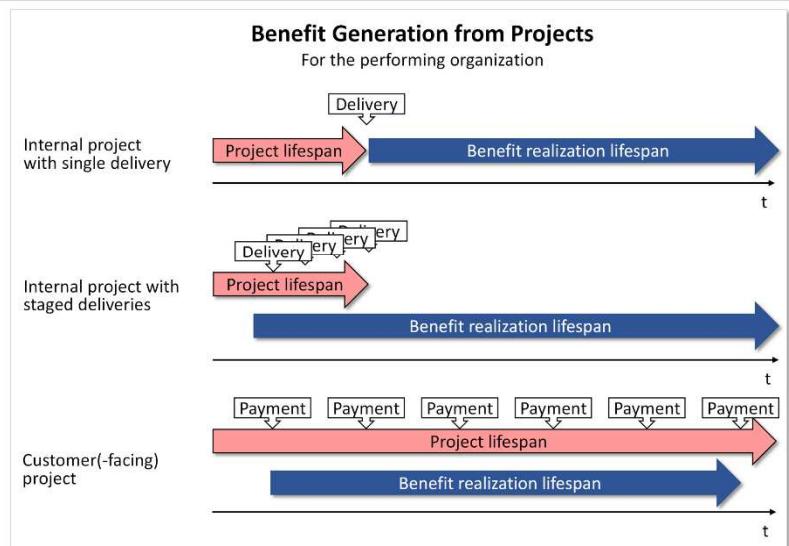
P. 68

Sl. 129

Along the Process for Project Business

Another major challenge

- For the end customer, the project is an internal project.
 - A cost center
 - Benefit realization is expected mostly or in full in the future.
- For contractors, the project is a customer project.
 - A profit center
 - Benefit realization begins with the first payment of the customer.
 - It ends with the last payment.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 69

Sl. 130

Along the Process for Project Business

Expectations of the parties



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 131

Along the Process for Project Business

More cross-corporate challenges



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 69 | Sl. 132

Along the Process for Project Business

Unifying forces



Long-term business

- Future business
- Being/having an incumbent supplier
- A foundation for future innovation and change for the customer

Pride in project results

Tangible after-project benefits

- Service fees
- Revenues from services, spare parts, etc.

Intangible benefits

- Reference customer
- Success story
- Winning new business
- Reputation

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 69

Sl. 133

Along the Process for Project Business

Cross-corporate communication risks, an example

- Schulz von Thun: How layers of communication create misunderstandings

- **Matter:**
Communicating things as they are.
- **Self-revealing:**
Communicating opinions and emotions.
- **Relationship:**
Communicating attitudes and affiliation.
- **Appeal:**
Calling for specific action or inaction.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 134

Along the Process for Project Business

Legal Risk of Communications



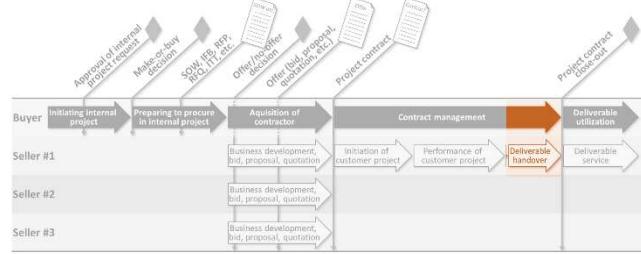
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 72 Sl. 135

Along the Process for Project Business

Handover/delivery, formal acceptance

- Related to the products, services, and/or other contractual deliverables.
- Validation that the contract has been fulfilled by the contractor.
- Often: Trigger for the last payment.

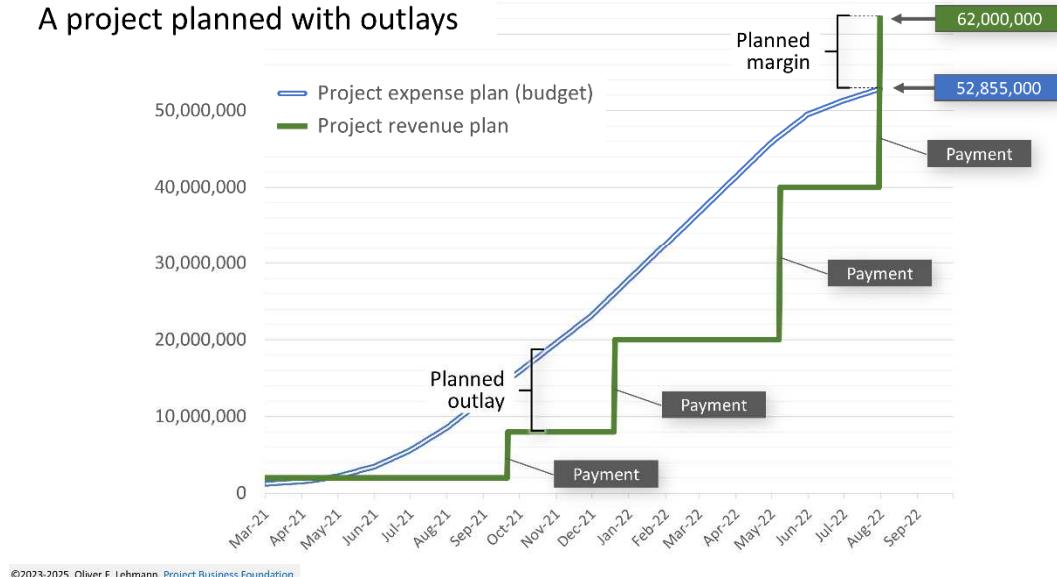


©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 72 Sl. 136

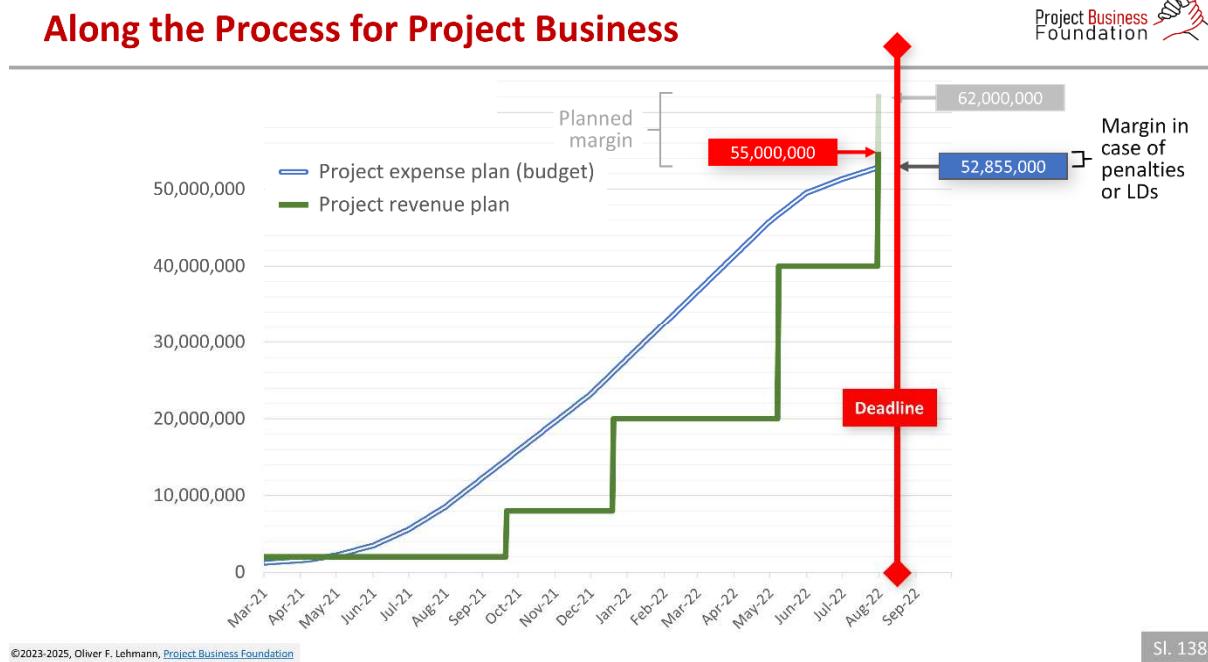
Along the Process for Project Business

A project planned with outlays



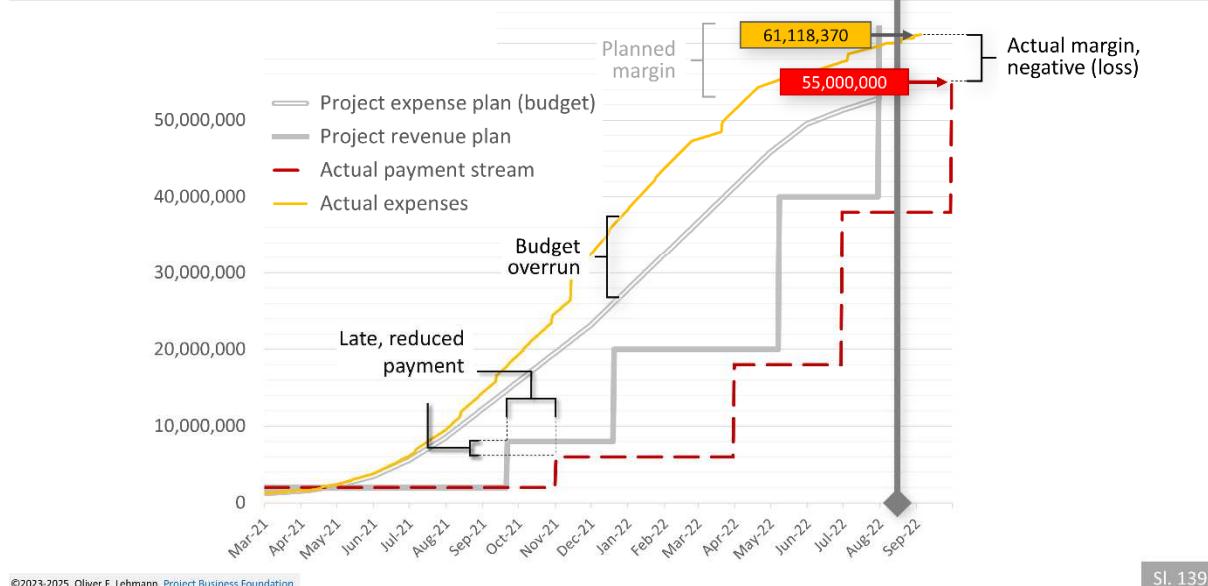
Sl. 137

Along the Process for Project Business



Sl. 138

Along the Process for Project Business

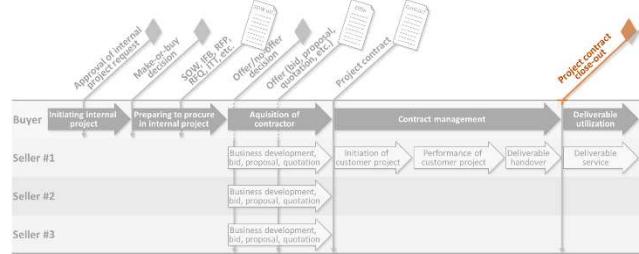


Sl. 139

Along the Process for Project Business

Formal close-out

- Recommended: A final document
 - Closing the project.
 - Terminating the business relationship.
 - Should include a mutual statement that apart from warranty (where applicable) all requirements have been met.



P. 72 Sl. 140

Along the Process for Project Business



Practical tips better for Project Business Management

- Purchasing, legal, and other departments are welcome as supporters in project business management, however, the pilot seat should be reserved for the project manager.
- Do your best to turn contract parties into project partners, based on trust and good faith.
- Stay prepared for a worst case, when a project ends with litigation.
- Lawsuits are won with better documentation. Or lost, when the other side has that.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 141



The agenda

1. Introduction
2. When the Project is the Business
3. Along the Process for Project Business
4. Contract Knowledge and Special Tools
5. Examination

©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 142

The agenda

1. Introduction
2. When the Project is the Business
3. Along the Process for Project Business
- 4. Contract Knowledge and Special Tools**
5. Examination



©2023 Project Business Foundation

Sl. 143

Contract Knowledge and Special Tools

Contract types

- Typical definitions in Civil Law and Common Law
- Please note: There are exceptions and the definitions are sometimes blurred.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Common Law

Contract types are defined based on the obligation of the customer to pay.

Civil Law

Contract types are based on the obligation of the seller to deliver a result or provide a service.

P. 116 Sl. 144

Contract Knowledge and Special Tools

Formal definitions mostly used in Civil Law

Product contracts

The contractor owes the customer a result that can be handed over or delivered.

This contract type commonly obliges the supplier to grant legal warranties.*

Service contracts

The contractor owes the customer a service or the availability of resources for a limited period of time.

This contract type does typically not imply legal warranties.*

*: Doublecheck with applicable law

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 116

Sl. 145

Contract Knowledge and Special Tools

Formal definitions mostly used in Common Law

Variable price contracts

The customer owes the contractor reimbursement of costs plus a fee, or alternatively a fixed rate for deliveries and services.

Common forms include:

- Cost (reimbursable) plus percentage fee*
- Cost plus fixed fee
- Time & Material
- Target-cost contract

Fixed price contracts

The customer owes the contractor a fixed price for the product or service.

Common forms include:

- Firm fixed price (= lump sum)
- Fixed price with economic price adjustments
- Unit price

*: Cost plus... = Cost reimbursable plus...

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 116

Sl. 146

Contract Knowledge and Special Tools

Application examples

- Scenario:

- Planned costs of a project: \$ 1,000,000
- Final costs after completion: \$ 1,500,000

Firm fixed price contract		
Original price	\$	1,400,000
Final price	\$	1,400,000
Original contractor margin	\$	400,000
Final contractor margin	\$	-100,000

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 116 Sl. 147

Contract Knowledge and Special Tools

Application examples

- Scenario:

- Planned costs of a project: \$ 1,000,000
- Final costs after completion: \$ 1,500,000

Cost plus fixed fee contract		
Fee	\$	200,000
Original price	\$	1,200,000
Final price	\$	1,700,000
Original contractor margin	\$	200,000
Final contractor margin	\$	200,000

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 117 Sl. 148

Contract Knowledge and Special Tools

Application examples

- Scenario:

- Planned costs of a project: \$ 1,000,000
- Final costs after completion: \$ 1,500,000

Cost plus percentage fee contract	
Fee	20%
Original price	\$ 1,200,000
Final price	\$ 1,800,000
Original contractor margin	\$ 200,000
Final contractor margin	\$ 300,000

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 117 Sl. 149

Contract Knowledge and Special Tools

Motivating contractors

Bonus	Risk sharing	Disadvantage
Incentives	Sharing of cost over-/underruns	Contractual penalties
Award fees		Liquidated damages (LDs)
Endorsements		

©2023-2025, Oliver F. Lehmann, Project Business Foundation

*: Civil law only.

P. 117 Sl. 150

Contract Knowledge and Special Tools

Motivating contractors

Disadvantage	
Contractual penalties	
Liquidated damages (LDs)	
	Fixed price contract with penalty
	Price for the delivery of product xyz: € 1,000,000
	– Penalty in case of delivery after 31-Dec: € 100,000
	Net price in case of delivery after 31-Dec: € 900,000

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 117 Sl. 151

Contract Knowledge and Special Tools

Motivating contractors

Disadvantage	
Contractual penalties	
Liquidated damage (LDs)	
	Fixed price contract with liquidated damages (LDs)
	Price for the delivery of product xyz: £ 1,000,000
	– LDs in case of delivery after 31-Dec: £ 100,000
	Net price in case of delivery after 31-Dec: £ 900,000

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 118 Sl. 152

Contract Knowledge and Special Tools

Motivating contractors

Bonus		
Incentives		
Award fees	\$ 900,000	
Endorsements	\$ 100,000	
Fixed price contract with incentive		
Price for the delivery of product xyz:	\$ 900,000	
+ Incentive for delivery latest on 31-Dec:	\$ 100,000	
Net price in case of delivery until 31-Dec:		\$ 1,000,000

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 118 Sl. 153

Contract Knowledge and Special Tools

Motivating contractors

Bonus		
Incentives		
Award fees		
Endorsements	\$ 900,000	
Fixed price contract with award fee		
Price for the delivery of product xyz:	\$ 900,000	
+ Award fee for convincing performance:	\$ 100,000	
Net price with award fee:		\$ 1,000,000

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 118 Sl. 154

Contract Knowledge and Special Tools

Motivating contractors - award fee assessment

Bonus

Incentives

Award fees

Endorsements

Monthly Award Fee Assessment Sheet

Red Ant Jun-15 YES!

Criteria	Weight (W)	Rating (R)	Score (W * R)
Communication: Proactiveness, responsiveness	10	5	50
Human resources employed: Aptitude, team spirit	7	8	56
Safety protocols: Compliance, communication	9	7	63
Documentation: Timeliness, correctness, quality	6	7	42
Change requests: Responsiveness, management	5	4	20
Management attention	8	10	80
Execution of task orders: Pace, correctness, attentiveness	10	10	100
Total score:			411
% achieved:			74.7%

Signed: A. Miller Approved: J.J. Kilroy

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 118

Sl. 155

Contract Knowledge and Special Tools

Motivating contractors - award fee assessment

Bonus

Incentives

Award fees

Endorsements

To whom it may concern

December 20, 2016

Letter of Endorsement for Red Ant Contracting

Dear Sir or Madam

We have been working intensively with Red Ant Contracting during our PIPE DREAM project in the years 2015 and 2016. They impressed and delighted us with the quality of their work, their responsiveness to our questions and concerns, and their proactive communication of emerging risks and challenges. Red Ant's staff was well-trained and capable of completing all tasks as expected and its management was open to our questions and concerns. At any time, we were treated as a VIP customer. We recommend using Red Ant Contracting for all work that is technically and organizationally demanding.

Best regards
J.J. Kilroy

©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 156

Contract Knowledge and Special Tools

Target Cost Contract

- Calculations

Cost saving:	
Fee	200,000
<u>20% share of cost saving</u>	+ 50,000
Margin	250,000

Cost overrun:	
Fee	200,000
<u>20% share of cost overrun</u>	-100,000
Margin	100,000

Target-cost contract with sharing of cost over-/underruns

Target cost:	\$ 1,000,000
+ Fee for the contractor:	\$ 200,000
Target price:	\$ 1,200,000
Benefit-cost sharing:	80/20 (cust./contr.)

Scenario 1: 25% cost saving

Actual project costs:	\$ 750,000
Margin for the contractor:	\$ 250,000
Price to the customer:	\$ 1,000,000

Scenario 3: 50% cost overrun

Project costs:	\$ 1,500,000
Margin for the contractor:	\$ 100,000
Price to the customer:	\$ 1,600,000

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 119 Sl. 157

Contract Knowledge and Special Tools

Target Cost Contract



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 158

Contract Knowledge and Special Tools

Target Cost Contract

- Calculations with price ceiling

Adding a price ceiling at \$ 1,400,000	
Target cost:	\$ 1,000,000
+ Fee for the contractor:	\$ 200,000
Target price:	\$ 1,200,000
Benefit-cost sharing:	80/20 (cust./contr.)

Scenario 1: 25% cost saving

Actual project costs:	\$ 750,000
Margin for the contractor:	\$ 250,000
Price to the customer:	\$ 1,000,000

Scenario 3: 50% cost overrun

Project costs:	\$ 1,500,000
Margin for the contractor:	\$ -100,000
Price to the customer (ceiling):	\$ 1,400,000

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 119 Sl. 159

Contract Knowledge and Special Tools

Target Cost Contract



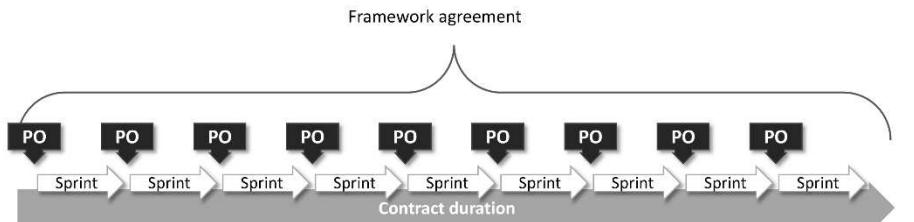
©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 160

Contract Knowledge and Special Tools

“Agile contracting”, common approaches:

- Agile fixed price
 - “Money for nothing and change for free.”
- Framework agreements
 - A framework with terms, conditions, price, etc. is defined
 - Individual purchase orders (POs) for small work units, each on fixed-price, such as
 - “sprints”
 - “user stories”
 - etc.



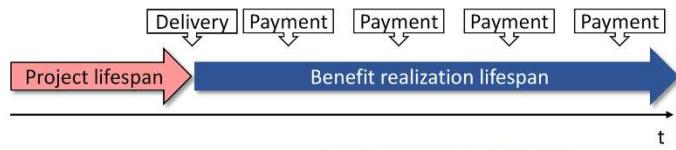
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 36 Sl. 161

Contract Knowledge and Special Tools

There is more in project business

- Freebie projects
 - = “Razor-&-blade” projects
 - The project is free for the customer
 - Future operational business with the customer will pay back the contractor’s investment,
- Consortia (temporary joint ventures)
- Project alliances (customer-led consortia)
- Procurement partnerships
- Not-for-profit projects
- Other forms of agreements that bring together diverse interests.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 75 Sl. 162

Contract Knowledge and Special Tools

Project Sponsors may rise to become Project Champions.

- Champions have an **open-door policy** for the project manager for quick escalation and decision-making.
- Champions show **commitment**. They go beyond formal support and actively commit to the project's success.
- Champions are **seen and heard**; they shape perceptions and influence stakeholder engagement.
- Champions wield **authority** to remove roadblocks, secure resources, and push through resistance.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 163

Contract Knowledge and Special Tools

Benefit Engineering

- Contract changes initiated by the contractor
- When contractual constraints damage project business
 - Deadlines
 - Other requirements and constraints
 - Customer payments
- Intention: Benefits for both sides customer and contractor



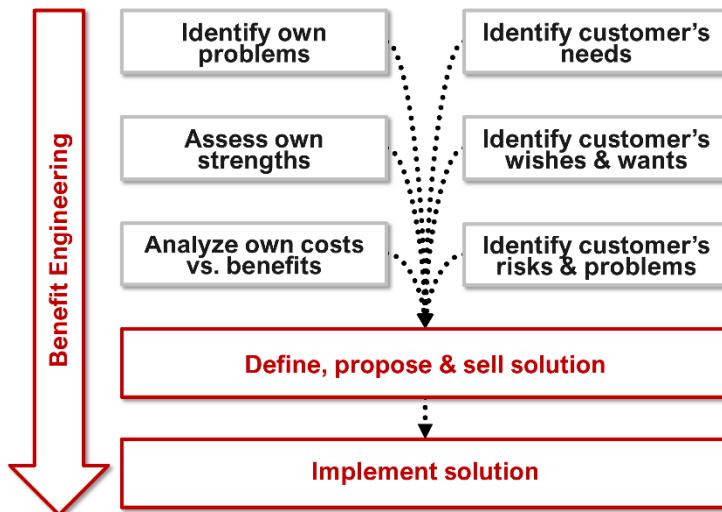
©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 120 Sl. 164

Contract Knowledge and Special Tools

Benefit Engineering

- Contract changes initiated by the contractor
- When contractual constraints damage project business
 - Deadlines
 - Other requirements and constraints
 - Customer payments
- Intention: Benefits for both sides customer and contractor



©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 120 Sl. 165

Contract Knowledge and Special Tools

Benefit Engineering

- Contract changes initiated by the contractor
- When contractual constraints damage project business
 - Deadlines
 - Other requirements and constraints
 - Customer payments
- Intention: Benefits for both sides customer and contractor

Typical Focus of Management Attention



In the past

- Poorly informed customers
- Employees doing mostly well-defined manual work
- Small number of long-term suppliers
- Few sources of raw materials
- Simple, static markets



Today

- Heterogeneous, global customers with easy access to information
- Talent gap for talented employees that do mostly intellectual work and are able to adapt quickly to changing requirements
- Complex and dynamic supply networks,

©2023-2025, Oliver F. Lehmann, Project Business Foundation

Contract Knowledge



Benefit Engineering

- Contract changes initiated by the contractor
- When contractual constraints damage project business
 - Deadlines
 - Other requirements and constraints
 - Customer payments
- Intention: Benefits for both sides customer and contractor

In the past

- Poorly informed customers
- Employees doing mostly well-defined manual work
- Small number of long-term suppliers
- Few sources of raw materials
- Simple, static markets
- Controllable competition
- Small number of laws
- Integrity considered a secondary topic
- Safety and security issues mostly ignored
- Static processes
- Well-predictable future
- Decisions driven by perceived importance



Today

- Heterogeneous, global customers with easy access to information
- Talent gap for talented employees that do mostly intellectual work and are able to adapt quickly to changing requirements
- Complex and dynamic supply networks, often developed ad-hoc
- Thorny competition for many raw materials
- Fast-changing global markets with disruptive innovations, often surprising incumbent players
- Dynamic competition
- Unmanageable "jungle" of national and international laws and regulations
- Professional integrity scrutinized by various stakeholders
- Safety and security issues have become mission critical
- Ever-changing processes with a high degree of adaptiveness & agility
- Future driven by disturbances & uncertainty
- Decisions driven by perceived urgency

©2023-2025, Oliver F. Lehmann, Project Business Foundation

P. 121

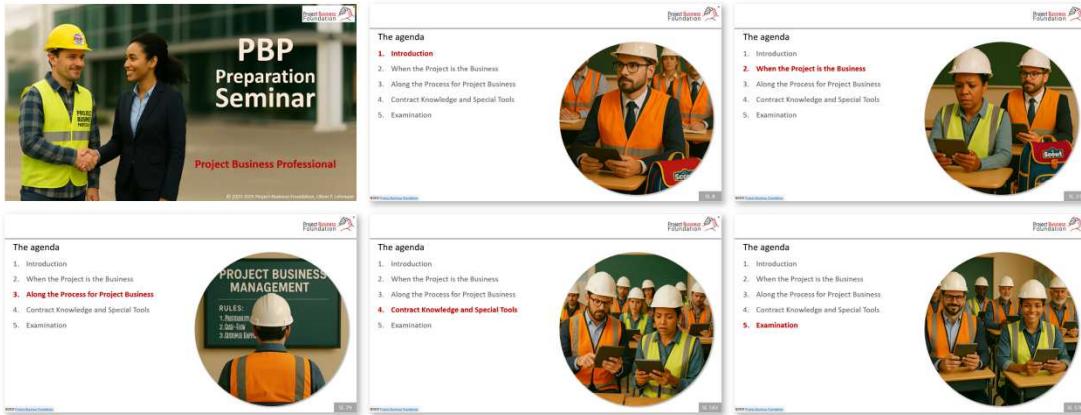
Sl. 167

If we still have the time

Project Business Foundation

Practice Questions

5



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 169

The agenda

1. Introduction
2. When the Project is the Business
3. Along the Process for Project Business
4. Contract Knowledge and Special Tools
- 5. Examination**



©2023 Project Business Foundation

Sl. 170

Examination

Next steps for you:

- Open the exam at:
<https://surveymonkey.com/r/PBP-Pilot-2>
- Read the Project Business Compendium. Spend some time with the glossary and the appendix.
- Go through the handout of this seminar and your notes.
- If you like, study some additional literature.
- Your password for the exam will be given to you by the trainer.



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 171

Thank you!

<https://Project-Business.org>

- Copyright note
 - All mentioned brand names and trademarks are owned by their respective holders
- Image credits:
 - Oliver F. Lehmann
 - Pixabay
 - Project Business Foundation
 - Shutterstock
 - Unsplash



©2023-2025, Oliver F. Lehmann, Project Business Foundation

Sl. 172

Practice Questions

Practice Questions 1

At this point, learners have already been introduced to core concepts such as:

- What Project Business is
- The transition from internal to cross-corporate projects
- Players and roles (buyers, sellers, prime contractors, subcontractors)
- The customer–contractor interface
- Basic legal and commercial factors
- The importance of integrity, risks, and interpersonal dynamics

Based on this, here are 15 multiple-choice practice questions appropriate for this knowledge level. **Each question has one correct and three false answers.**

1. **What defines a project as “Project Business”?**

- A. It is performed within one department using internal resources.
 - B. It is performed between several departments using their own resources.
 - C. It is done under contract between legally independent parties.
 - D. It supports the operational business of the performing organization.
-

2. **Which of the following skills is specifically required by project managers in Project Business but is generally not necessary for project managers leading internal projects?**

- A. Technical planning and scheduling
- B. Contractual and legal management
- C. Team leadership
- D. Risk assessment

3. What is the key risk for the contractor in a turnkey project?

- A. Loss of employee engagement.
- B. Delay of internal decision-making.
- C. Poorly defined project mission.
- D. Liquidity gaps and delayed profitability.

4. Which of the following roles is “sandwiched” between customer and subcontractors?

- A. Prime contractor
- B. Auditor
- C. Project sponsor
- D. Freelancer

-
- 5. A senior manager in your organization insists that project business is no different from internal project work, and all should switch to agile methods to make customer projects more profitable.**

How should you respond?

- A. Agree and switch to agile to avoid the discussion with your superior manager.
- B. Emphasize that in project business, legally enforceable contracts must be fulfilled.
- C. Tell the person the PMBOK Guide fully covers project business already.
- D. Suggest switching to agile and checking the contract later when there is more time.

-
- 6. As a project manager for a project customer, a delay by a subcontractor is threatening your delivery date. Your manager asks you to directly instruct the subcontractor.**

What is your best response?

- A. Issue the instruction directly to the subcontractor to maintain progress.
- B. Escalate to the customer's procurement department.
- C. Coordinate a solution with the prime contractor.
- D. Replace the subcontractor without informing the prime contractor.

7. What is the purpose of a “Project Business Healing Day”?

- A. To resolve ongoing conflicts and improve cooperation.
- B. To celebrate project milestones with clients.
- C. To discuss lessons learned after project closeout.
- D. To perform acceptance testing of deliverables.

8. You are evaluating whether to submit an offer in response to an RFP.

Which of the following should raise a red flag during the offer/no-offer decision?

- A. The customer has a strong reputation and pays early.
- B. Your project team is currently fully booked.
- C. The RFP includes a clearly written procurement SOW.
- D. The customer is offering a fair payment schedule.

9. You're running a project with a high number of contractors over several tiers.

What should you take special care of?

- A. You should avoid communicating directly with contractors and leave that to the legal department.
 - B. You should ignore the financial health of contractors as it's their responsibility.
 - C. You should discourage collaboration between contractors to avoid conflicts of interest.
 - D. You should know all the companies that work on your project.
-

10. What is the main benefit of documenting every decision and communication in project business?

- A. It speeds up the execution.
- B. It reduces the customer's payment obligations.
- C. It can serve as evidence in disputes or litigation.
- D. It replaces the need for a project manager.

11. You are a prime contractor, and your subcontractor requests payment before your customer has paid you. Unless otherwise stated in the contract, what is your obligation?

- A. Ask the subcontractor to wait until you have received payment from the customer.
- B. Terminate the contract with the subcontractor to avoid early payment.
- C. Instruct the customer to pay the subcontractor directly on your behalf.
- D. Pay the subcontractor as agreed, regardless of customer payment status.

12. Which of the following is a typical responsibility of the customer (buyer) in project business?

- A. Drafting and submitting offers on behalf of contractors.
- B. Providing enabling services to the contractors.
- C. Approving subcontractors without contractual authority.
- D. Writing the contractor's project plan.

13. Why is integrity particularly important in project business environments?

- A. Because most project teams are remote.
- B. Because project business needs correct and up-to-date data.
- C. Because unethical people increase risks for all parties.
- D. Because it simplifies project scope definition.

14. Which statement best describes the shift from internal projects to project business?

- A. Project business simplifies resource allocation and control.
- B. Internal projects use more legal documentation.
- C. Internal projects treat vendors as stakeholders.
- D. Project business brings resources from external organizations.

-
- 15. During a cross-corporate project, cultural misunderstandings and different business interests lead to growing distrust and quarreling between customer and contractor management teams.**

What is the best immediate action?

- A. Schedule a facilitated Healing Day.
- B. File a formal dispute.
- C. Replace the contractor team.
- D. Let both teams work it out on their own.

Practice Questions 2

The following concepts have been introduced and discussed:

- Project selection and make-or-buy decision
- Business development and offer strategies
- Vendor selection, hit rates, and offer presentations
- Contract formation, content, and project charters
- Contract performance and management plans
- Cross-corporate leadership, audits, integrity, and project business ethics

Based on this, here are 10 multiple-choice practice questions appropriate for this knowledge level:

16. What decision initiates the formal transition from business development to contract execution?

- A. Selection of vendors
 - B. Start of negotiations
 - C. Submission of an invoice
 - D. Closure of the project contract
-

17. In project business, what does the term “health check” refer to?

- A. A financial audit of the contractor
 - B. A review of deliverables by the project manager
 - C. An audit to assess project management capability
 - D. A legal review of contracts
-

18. What is the typical purpose of a “Mission Statement” in a cross-corporate project?

- A. Define the contract scope.
- B. Summarize financial targets.
- C. Serve as a replacement for a project charter.
- D. Unite parties around a shared goal.

19. Which factor most strongly contributes to low hit rates for contractors?

- A. Flexible payment terms
- B. Competing vendors
- C. Other clients blocking contractor resources
- D. Banks rejecting credits

20. Offers using standard templates often fail due to

- A. Performance bonds
- B. Lack of humor in the offer
- C. Lack of customer specificity
- D. Competing vendors using AI

21. In Common Law, what is “consideration”?

- A. Disadvantages or obligations agreed to by each party
- B. A conflict resolution method based on empathy
- C. The process of offer submission and final acceptance
- D. The negotiation of penalties and liquidated damages

22. What is the primary function of management plans in project business?

- A. Define budgets across the network of vendors
- B. Guide cross-corporate management processes
- C. Record time tracking across the network of vendors
- D. Replace the project contract with a project charter

23. Which of the following is true about offer presentations in project business?

- A. They should avoid improvisation at all costs and stick to the script.
- B. They must only focus on the vendor company's strengths and past successes.
- C. They should demonstrate the seller's understanding of the customer's needs.
- D. They are usually optional in public procurement for government projects.

24. Why are sufficient contribution margins important in project business?

- A. They show how subcontractors are paid for their contribution to the project.
- B. They add up to profitability across a portfolio of customer projects.
- C. They indicate the percentage of deliverables completed against the scope baseline.
- D. They are only relevant for internal budgeting and cost tracking against the cost baseline.

25. As a contractor, you've already delivered the final increment, and the product of your project has been in use for some time without issues or complaints. However, the customer is delaying the formal acceptance that precedes the final payment.

What is your best next step?

- A. Inform the customer you consider the product accepted under “constructive acceptance” and send your invoice.
 - B. Terminate the contract immediately and invoice work and deliveries provided up to this point.
 - C. File a legal claim to enforce formal acceptance by the customer as a basis for the final invoice.
 - D. Send the final invoice and stop all communication until the customer has made the payment.
-

26. You are asked to create a project charter for a newly won customer project.

What should you include?

- A. A list of competitors from the bidding process.
 - B. Reference to the project contract and business obligations.
 - C. Sales metrics and procurement statistics.
 - D. Technical specifications and other requirements that must be met.
-

27. What does a “screening system” for vendor selection use as its primary decision tool?

- A. Price only
- B. Weighted performance metrics
- C. Yes/No answers to criteria
- D. Customer reputation

28. A subcontractor is proposed by your team, but your customer rightly insists on auditing them before approval.

What is their most likely justification?

- A. The customer doesn't trust your project plan.
- B. Privity of contracts gives them the right to audit.
- C. The contract allows for customer-initiated audits.
- D. Audits are an entitlement given to project customers by law.

29. What is typically the binding document to be signed before starting contractual work?

- A. Project mission
- B. Risk register
- C. Bid presentation
- D. Project contract

30. During your offer presentation, a manager of the prospective client asks, “Why should we choose you?”

What is the best approach?

- A. Show how your team uniquely understands their needs and goals.
- B. Emphasize your company’s longevity and financial stability.
- C. Point to the weaknesses of your competitors and how they fail to satisfy customers.
- D. Quote your lowest price and expand the payment terms.

Practice Questions 3

Learners have explored advanced topics in contract management, closing processes, and special forms of project business (e.g., freebies and not-for-profits). Emphasis has also been placed on:

- Handover, acceptance, and formal close-out
- Risk management during project execution
- Benefit engineering and contractor motivation
- Project champions and leadership behavior
- Communication risks and contract awareness

Here are more multiple-choice practice questions, with 1 correct answer each:

31. You're the contractor. The customer has started using your deliverables without signing the final acceptance.

What is the potential legal implication?

- A. It may be considered constructive acceptance.
- B. Nothing changes until acceptance is signed.
- C. It's theft, as the contractor still owns the items.
- D. It makes the project internal.

32. A project sponsor only provides formal sign-offs but avoids active involvement and support for the project manager.

What key element is missing?

- A. Authorization
- B. Contractual power
- C. Champion behavior
- D. Technical knowledge

33. You are planning to close out a contract.

What should you include in the close-out document?

- A. A renewed proposal for follow-up business
- B. A termination letter to all subcontractors
- C. A detailed customer satisfaction survey
- D. A mutual statement that all obligations except warranty are fulfilled

34. A customer questions the late delivery and threatens penalties, but they delayed key enabling services described in the contract.

What's your best response?

- A. Accept penalties to preserve the relationship
- B. Suggest terminating the project
- C. Escalate directly to court
- D. Refer to the agreed enabling services clause

35. In your cross-corporate project, communication problems are frequent.

What is a practical first step?

- A. Reduce written communication
- B. Set up a shared mission statement
- C. Use only legal language in all emails
- D. Replace all project partners

36. You lead a not-for-profit project business initiative.

What distinguishes it from commercial projects?

- A. No contract is required
 - B. Success is measured in profit margin
 - C. Value delivered replaces value captured
 - D. The project cannot be cross-corporate
-

37. A team member insists the customer is wrong, but you've seen the contract contradict that.

What's the most responsible action?

- A. Re-read the contract and clarify with both parties
 - B. Side with your team member
 - C. Ignore the contradiction and go on working for the customer
 - D. Tell the customer they're breaching terms
-

38. As the project manager, you're asked to justify a recent budget overrun in a project under cost re-imbursable contract. You know a message on the overrun was not sent to the customer, and a contract change request was never formally processed.

The customer will have to pay the overrun. What should you do?

- A. Submit the change retroactively and ensure silent but swift processing.
 - B. Ask finance to reclassify the overrun to avoid billing to the customer.
 - C. Blame the subcontractors for the poor communications.
 - D. Acknowledge the gap and explain the oversight.
-

39. You're closing out a project with a contractor and realize some contractually mandated enabling services were provided but never formally documented and tracked.

What might this impact?

- A. It can weaken your legal position in a dispute.
 - B. Nothing, since documenting is the contractor's duty.
 - C. It invalidates the contract.
 - D. It improves customer satisfaction.
-

40. The customer wants to renegotiate deadlines due to new internal priorities.

What is a benefit-engineering approach?

- A. Politely decline the request and insist on keeping the current schedule.
 - B. Agree to revise the deadlines in exchange for additional compensation or future opportunities.
 - C. Raise a formal claim for breach of contract based on the delayed collaboration.
 - D. Replace the current project team with one that is better aligned with the customer's needs.
-

41. In a formal close-out session, the customer demands additional features not in the contract.

What's the most professional response?

- A. Accept to ensure goodwill.
- B. Add them quickly without delay.
- C. Offer to scope them in a follow-up contract.
- D. Inform them that the project is over.

42. You are preparing for contract close-out and find a clause that contradicts national law.

What do you do?

- A. Enforce the clause as written.
- B. Rewrite the contract yourself.
- C. Ignore it since the project is ending.
- D. Flag it and consult legal.

43. You're working on a freebie project. The customer is delaying operational adoption.

What risk are you facing?

- A. Positive cash flow from after-project service business
- B. Delayed payback through future services
- C. Reduced internal engagement
- D. Having to issue penalties

44. A senior manager insists on bypassing documentation to speed things up and save costs.

What's your best response?

- A. Explain that poor documentation increases legal exposure
 - B. Tell them it's acceptable in cross-corporate work to work based on a handshake
 - C. Agree and remove the records
 - D. Reassign the manager and replace him with a more capable person
-

45. You're negotiating changes to contract terms due to unexpected inflation.

How can benefit engineering support your case?

- A. Withhold deliveries until paid more.
 - B. Offer added services or extensions that benefit the customer.
 - C. Request arbitration by a capable lawyer or a chamber of commerce.
 - D. Stop work until a new contract is signed.
-

Practice Questions 4

The seminar has so far addressed topics such as:

- Contract types (fixed price, reimbursable, T&M, target cost)
- Legal systems and enforceability
- Motivation through incentives, including award fees
- Price ceilings and profit-sharing
- Agile and hybrid contract approaches
- The contractor's business model and risk exposure
- Contractual fairness, enforceability, and pitfalls

Here are mostly situational practice questions, suitable for this advanced point in the seminar.

46. A contractor on a capped target cost contract identifies a likely cost overrun that leads to a negative margin.

What should they do to maintain a positive margin?

- A. Hide the overrun to protect their image
- B. Push for re-negotiation based on benefit engineering
- C. Stop work until the customer agrees to higher pay
- D. Increase the cost estimate to cover unknowns

47. Your project uses a cost-reimbursable contract. The customer demands proof that a charge was legitimate.

What's your best course of action?

- A. Refer them to the subcontractor for a detailed explanation.
- B. Quote a flat hourly rate.
- C. Provide timesheets, receipts, and other documentation.
- D. Remind them the contract doesn't require this.

48. In a civil law country, a clause lacks clarity and contains ambiguous wording.

What is a realistic risk?

- A. The clause is automatically interpreted in favor of the customer.
- B. The clause might not be enforceable in court.
- C. The clause defaults to U.S. Common Law.
- D. The clause is enforceable as long as both parties signed it.

49. Your customer introduces a rolling award-fee model to incentivize performance.

What should your team focus on to benefit from the model?

- A. Focus on meeting or exceeding the KPIs defined in the award-fee agreement.
 - B. Focus on avoiding risks even if it means slowing down the project.
 - C. Focus only on documenting what is contractually required to deliver.
 - D. Focus on reducing the quality of service in order to cut project expenses.
-

50. The fixed price project you lead is 40% over budget.

What's the most accurate implication?

- A. The customer must pay the extra costs.
- B. The project is going to make a loss.
- C. The contractor absorbs the overrun.
- D. The contract converts automatically to T&M.

51. A subcontractor offers you a discount in return for earlier payment.

What should you verify before accepting?

- A. Whether this violates jurisdictional labor law.
 - B. Whether the subcontractor is in financial trouble.
 - C. Whether their license is still valid.
 - D. Whether it's worth renegotiating all contracts.
-

52. You're using a Target Cost Contract. Actual costs are below target.

What happens next?

- A. The customer reclaims the savings solely for themselves.
- B. The contractor receives all savings along with the fixed fee.
- C. The savings are shared based on the contract agreement.
- D. The project must be re-baselined immediately.

53. The customer insists on using a framework agreement.

What should the contractor clarify?

- A. How purchase orders will activate parts of the contract.
 - B. The project's vision, mission, and long-term intentions.
 - C. The date, time, and place of the contract award ceremony.
 - D. Whether it replaces project documentation.
-

54. Your company is selected under a T&M contract.

How can you prevent margin loss?

- A. Add a high-risk buffer to every time entry.
- B. Work as slowly as possible to increase the recorded time.
- C. Avoid customer communication.
- D. Ensure accurate time logging and cost tracking.

55. You realize a clause conflicts with local law after contract signature.

What is your best move?

- A. Raise the issue and propose a legally valid amendment.
 - B. Enforce the clause regardless of the legal situation.
 - C. Ignore the problem unless challenged by the other party.
 - D. Delay discussion until project delivery.
-

56. You're in a rolling award fee scheme, but since the last assessment, your team has missed a crucial intermediate deadline.

What can you do to avoid losing the fee?

- A. Ask the customer for a fixed bonus instead.
 - B. Backdate progress reports.
 - C. Demonstrate added value in other critical areas.
 - D. Terminate the award fee agreement and reallocate resources.
-

57. A clause on “money-for-nothing-and-change-for-free” is part of an agile fixed-price contract.

What is the customer entitled to if they terminate early?

- A. A full refund of all payments made to the contractor.
- B. Unless otherwise stated in the contract, nothing.
- C. Free delivery of all unfinished work.
- D. Reclaim of unused budget.

58. During a contract review, the legal team flags a clause that is not central to the agreement's purpose as potentially illegal under the applicable jurisdiction's standards. The contract includes a severability clause.

What's the likely result?

- A. Immediate financial penalty.
- B. Clause might be void and unenforceable.
- C. Entire contract is void and unenforceable.
- D. Contract shifts to another legal system.

59. You are the project manager assigned by a contractor working for a customer-led consortium (temporary joint venture).

What makes the project especially complex for you?

- A. Excessive technical detail due to the great number of parties involved
- B. Late payments as the venturers keep the consortium short of money
- C. Unclear liability distribution among the consortium's venturers
- D. Only one party signs the contract

60. A lawyer insists every communication can be used in litigation and tells you to reduce messages to not provide the other party with evidence in such a case.

What should the project manager do?

- A. Avoid all forms of written or recorded communication.
- B. Communicate only in informal or verbal meetings.
- C. Refer all communication tasks entirely to legal counsel.
- D. Document clearly and avoid emotional tone.

Practice Questions 5

The seminar has reached a full-circle understanding of Project Business, touching on:

- All major phases of project business (selection, bidding, contracting, delivery, close-out)
- Legal and commercial elements (e.g. enforceability, contract terms, jurisdiction)
- Relationship dynamics (trust, conflict resolution, cross-cultural collaboration)
- Special forms of project business (e.g. PPPs, freebie, not-for-profit)
- Contractor profitability, documentation, and ethics
- Leadership and decision maturity in cross-corporate settings

Here are 15 mostly situational multiple-choice questions that reflect this maturity level:

-
- 61. A customer refuses to pay an invoice because you missed a delivery date, but provisions necessary to complete the items under discussion were not delivered timely by the customer contributing to the delay.**

What should you do?

- A. Sue the customer for damages under the “Concurrent Delay” doctrine.
- B. Accept responsibility and cover the resulting costs.
- C. Refer to the enabling services and provisions clause and seek resolution.
- D. Set the issue aside and address it during project close-out.

62. You discover that one contract clause may violate anti-corruption laws in the jurisdiction applicable to the contract.

What is your responsibility as a contractor?

- A. Raise the issue and seek an amendment before further execution.
- B. Request a lawyer to rewrite the entire contract.
- C. Continue without concern unless challenged.
- D. Inform procurement only if litigation occurs.

63. Your new subcontractor is rejected by the customer. You suspect it's due to a privity misunderstanding.

What should you do?

- A. Immediately terminate the subcontractor.
- B. Clarify the customer's rights as defined in the contract.
- C. Escalate to court litigation and sue the customer for damages.
- D. Accept their decision silently and find another solution.

64. A fellow project manager says, “I don’t need to read the contract; I just manage the work.”

How do you respond?

- A. Agree and focus only on the technical scope of the project.
- B. Offer to provide a summary of the contract’s main provisions.
- C. Remind them that managing project business requires knowing the contract.
- D. Report the matter directly to the legal department without discussion.

65. During a Project Business Healing Day, you notice defensive-aggressive behavior from various of the parties.

What’s the best facilitator action?

- A. Shift the conversation to contractual penalties
- B. Emphasize mission success and mutual benefits
- C. Allow all sides to vent without steering
- D. End the session early and follow up with written recommendations later

66. Your project portfolio is profitable overall, but one customer project is dragging its profit margin into the negative.

What should you do?

- A. Cancel the customer project to stop further losses.
 - B. Ignore the issue if overall portfolio numbers stay positive.
 - C. Reassign indirect costs to improve the project's margin.
 - D. Review the contract and delivery model to seek renegotiation.
-

67. A not-for-profit project is being delayed by legal reviews of the customer's books. The customer asked you to halt work until the review is ended.

As the contractor-side project manager, what's your best course?

- A. Cancel the non-disclosure agreement to help speed up the legal process.
- B. Continue working on the project according to the contract even if the customer asked you to pause.
- C. Engage with the customer and legal teams to clarify concerns and unblock progress.
- D. Terminate the entire project due to the uncertainty caused by the delay.

68. A new customer wants to use a “Memorandum of understanding” instead of a formal contract.

What’s the risk for the contractor?

- A. Lack of enforceability if the agreement falls apart later.
 - B. Unnecessary complexity caused by too much formality.
 - C. Full enforceability guaranteed regardless of contract type.
 - D. Excessive paperwork resulting from duplicated documents.
-

69. You are managing a cross-cultural project involving multiple organizations from different countries. A team member from another company challenges your interpretation of the term “approval,” claiming it means something different in their context.

To avoid confusion and project risk, what should you check first?

- A. Review the national legal framework to see how approval is defined.
- B. Consult the glossary of project business terms used in training materials.
- C. Analyze the team member’s background to understand their experience.
- D. Check how the term is defined and applied in the governing contract.

70. A stakeholder says the project is a cost center, but you're managing it as a profit center.

Who's right?

- A. Both may be correct depending on each party's organizational perspective.
 - B. Neither view is valid given how projects are typically accounted for.
 - C. The stakeholder's view is correct based on internal cost structure.
 - D. The contractor is always right when managing external projects.
-

71. A customer uses knowledge from your rejected bid to execute the project internally.

What lesson should you draw?

- A. Avoid participating in public tenders to reduce this type of risk.
- B. Always increase the proposed price to offset potential misuse.
- C. Initiate legal action against the customer without delay.
- D. Be more selective and cautious when disclosing details in bids.

72. Your company wants to terminate the contract with a contractor due to poor performance. The contract lacks a termination clause.

What's your company's risk?

- A. None – termination is generally allowed under business freedom.
- B. High – may result in a breach of contract and legal exposure.
- C. Low – courts usually interpret such cases in favor of customers.
- D. Medium – exposure exists but would likely be limited in scope.

73. Your team identifies an opportunity to perform extra work that would clearly benefit the customer but is not covered by the contract.

Applying a benefit engineering approach, what should you do?

- A. Log it formally as a change request supported by customer value.
- B. Proceed with the extra work now and submit the invoice afterward.
- C. Decline the work since it is outside your contractual obligations.
- D. Issue an invoice immediately and hope for later acceptance.

74. A contractor issues a formal claim citing costly disruption of their work by another contractor and contract noncompliance by the customer to supervise project work. You know the issue arose from an undocumented and unauthorized change implemented by the contractor.

What helps most?

- A. Verbal confirmation provided informally by the project sponsor.
- B. A recorded video call held during a previous team discussion.
- C. Written records that document relevant project communication.
- D. Signed witness statements from those involved in the situation.

75. Cross-corporate projects involve multiple organizations with differing business interests, but long-term success depends on aligned collaboration.

What fundamental principle should guide behavior and decision-making in project business environments?

- A. Prioritizing internal performance metrics over external cooperation.
- B. Acting as a contract party, not a project partner, to protect legal position.
- C. Maximizing financial efficiency by reducing coordination across parties.
- D. Focusing on Completing over Competing to ensure joint project success.

76. As projects grow in size in professional Project Business, they involve more people, organizations, contracts, and dependencies, making coordination and error prevention critical for mission success.

What becomes the most common source of problems as project size and complexity increase?

- A. Internal team conflicts within the individual organizations involved.
- B. Troubled interfaces between customers, contractors, and other parties.
- C. Budget constraints imposed by executive sponsors and program managers.
- D. Technical errors in specifications and scope documentation leading to scope creep.